

INCH-POUND

MIL-STD-633F

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SUPERSEDING

MIL-STD-633E

22 FEBRUARY 1980

DEPARTMENT OF DEFENSE INTERFACE STANDARD

STANDARD FAMILY OF MOBILE ELECTRIC POWER GENERATING SOURCES

GENERAL DESCRIPTION INFORMATION AND CHARACTERISTIC DATA



**REINSTATED AFTER JUNE 21, 2012 AND MAY BE USED FOR NEW ACQUISITIONS
AND EXISTING DESIGNS AND ACQUISITIONS**

AMSC N/A

FSC 6115

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FOREWORD

1. This standard is approved for use by the Departments and Agencies of the Department of Defense.
2. This Military Standard provides interface and technical information on standard mobile electric power sources for use by all Departments and Agencies of the Department of Defense (DoD).
3. Preparation of this document has been authorized by the Department of Defense Directive 4120.11, Standardization of Mobile Electric Power (MEP) Generating Sources, April 13, 2004, which assigns to the Project Manager, Mobile Electric Power (PM-MEP) the responsibility for establishing the Department of Defense Standard Family of Mobile Electric Power Generating Sources (MEPGS).

The following are extracts from DoD Directive 4120.11: (Additional information on this policy can be found at: <http://www.dtic.mil/whs/directives/corres/pdf/412011p.pdf>).

“4. POLICY

4.1. It is DoD policy to:

4.1.1. Establish, maintain, and provide a DoD standard family of MEP generating Sources for maximum use by DoD Components.

4.2. In designing and developing end items and systems requiring electric power from MEP generating sources, the DoD Components shall consider the characteristics and suitability of the DoD standard family of MEP generating sources, as defined in reference (b) and MIL-STD-1332 (reference (c)).

4.3. When MEP generating sources are designed in, and procured as, an integral part of an end item or system, the current DoD standard MEP generating sources in reference (b) shall be used to the maximum extent practicable.

4.4. The DoD Components requiring MEP generating sources other than those available in the standard family shall so advise and obtain approval from the PM-MEP before starting procurement. The PM-MEP shall expedite action on such requests, as described in Note 9 of Appendix B in Subpart 208.7000(a) of the DFARS (reference (d)).”

4. The DoD Standard Family of Mobile Electric Power Generating Sources (MEPGS) has been designed to comply with DoD Directive 4140.25, Subject: DoD Management Policy for Energy Commodities and Related Services. Directive 4140.25 establishes DoD bulk Petroleum Management Policy. (Additional information on this policy can be found at: <http://www.dtic.mil/whs/directives/corres/pdf/414025p.pdf>) The fuel standardization policy, paragraph 4.2 of the DOD Directive 4140.25, follows:

“4.2. Fuel Standardization. The Combatant Commanders shall develop plans to minimize the types of fuels required in joint operations. The Military Services shall design and

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procure weapon systems, support equipment, and vehicles. The Military Services shall also qualify new systems to use readily available commercial-type fuels. Standard fuels approved by the Defense Standardization Program are listed in the Department of Defense Index of Standards and Specifications Federal Supply Group 91. Primary fuel support for land-based air and ground forces in all theaters (overseas and in the Continental United States) shall be accomplished using a single kerosene-based fuel, in order of precedence: JP-8, commercial jet fuel (with additive package), or commercial jet fuel (without additives), as approved by the Combatant Commander. Fuel support for ground forces may also be accomplished using commercially available diesel fuel when supplying jet fuel is not practicable or cost effective. Primary fuel support for sea-based aircraft shall be a high-flash kerosene-based fuel, designated JP-5. In overseas theaters where the predominant fuel requirement is in support of the Navy, JP-5 may be substituted for JP-8, as approved by the Combatant Commander. Conventionally powered ships shall use a distillate-type fuel, designated F-76 for propulsion. Military Sealift ships may use commercial marine fuels for propulsion. The type of fuel designated for the battlefield shall be specified by the Combatant Commander depending on fuel availability and equipment to be used within the theater. To the maximum extent practical, no new combat support or combat service support equipment or vehicles requiring gasoline-type fuels shall be acquired or developed unless the support concept is to supply fuel as a packaged product.”

5. Comments, suggestions, or questions on this document should be addressed to:
DEPARTMENT OF THE ARMY, DOD Project Manager, Mobile Electric Power, 5850
Delafield Road, Bldg 324, Fort Belvoir, VA 22060-5809. Phone: (703) 704-3162, DSN 654-
3162, FSince contact information can change, you may want to verify the currency of this
address information using the ASSIST on line database at: <https://assist.dla.mil>.
Fax:(703)704-3257, DSN: 654-3257
Website: <http://www.pm-mep.army.mil>
Email: See website

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MIL-STD-633F**1. SCOPE**

1.1 Scope. This standard provides detailed information on the physical and electrical characteristics and logistical data on the DoD Standard Family of Mobile Electric Power Generating Sources.

1.2 Applicability. The standard has been prepared for use by all Departments and Agencies of the DoD in selecting Mobile Electric Power Generating Sources (MEPGS) and ancillary equipment for applications requiring mobile sources of electric power and also to assist the Project Manager - Mobile Electric Power (PM-MEP) in effecting management and standardization of such sources of power within the DoD. The MEPGS listed herein are the only mobile power sources authorized for procurement. DoD components with mobile electric power requirements within the range of 0.5 kW through 1.1 megawatt, whose needs cannot be satisfied by one of the listed MEPGS, shall obtain deviation approval from the PM-MEP before taking any procurement action. Special instructions on the preparation and submittal of deviations are contained in AR 700-101, AFI 63-110(I), MCO 11310.8C, DLAR 4120.16 titled Joint Operating Procedures Management and Standardization of Mobile Electric Power Generating Sources. Online versions are available at: http://www.apd.army.mil/pdffiles/r700_101.pdf.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 of this standard. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections 3, 4, or 5 of this standard, whether or not they are listed.

2.2 Government documents.**DEPARTMENT OF DEFENSE****STANDARDS**

MIL-STD-461	REQUIREMENTS FOR THE CONTROL OF ELECTROMAGNETIC INTERFERENCE CHARACTERISTICS OF SUBSYSTEMS AND EQUIPMENT
MIL-STD-705	GENERATOR SETS, ENGINE DRIVEN METHODS OF TESTS AND INSTRUCTIONS
MIL-STD-882	STANDARD PRACTICE FOR SYSTEM SAFETY
MIL-STD-1332	DEFINITIONS OF TACTICAL, PRIME, PRECISE, AND UTILITY TERMINOLOGIES FOR CLASSIFICATION OF THE DOD MOBILE ELECTRIC POWER ENGINE GENERATOR SET FAMILY
MIL-STD-1472	DESIGN CRITERIA STANDARD HUMAN ENGINEERING
MIL-STD 1474	DESIGN CRITERIA STANDARD NOISE LIMITS

SPECIFICATIONS

MIL-A-53009	ADDITIVE, ANTIFREEZE EXTENDER, LIQUID COOLING SYSTEMS
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MIL-DTL-53072	CHEMICAL AGENT RESISTANT COATING (CARC) SYSTEM APPLICATION PROCEDURES AND QUALITY CONTROL INSPECTION
MIL-DTL-22992	CONNECTORS, PLUGS AND RECEPTACLES, ELECTRICAL, WATERPROOF, QUICK DISCONNECT, HEAVY DUTY TYPE, GENERAL SPECIFICATION FOR
MIL-DTL-83133	TURBINE FUEL, AVIATION, KEROSENE TYPE, JP-8 (NATO F-34), NATO F-35, AND JP-8+100 (NATO F-37)
MIL-PRF-2104	LUBRICATING OIL, INTERNAL COMBUSTION ENGINE, COMBAT/TACTICAL SERVICE
MIL-PRF-46167	LUBRICATING OIL, INTERNAL COMBUSTION ENGINE, ARCTIC

COMMERCIAL ITEM DESCRIPTIONS

A-A-52557	FUEL OIL, DIESEL; FOR POSTS, CAMPS AND STATIONS
A-A-52624	ANTIFREEZE, MULTI ENGINE TYPE
A-A-55804A	RODS, GROUND (WITH ATTACHMENTS)

Copies of these documents are available online at: <http://assist.dla.mil/quicksearch/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.

2.2.1 Other Government publications. The following other Government publications form a part of this document to the extent specified herein.

ARMY FIELD MANUALS

FM 5-424	THEATER OF OPERATIONS ELECTRICAL MANUALS
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DEPARTMENT OF DEFENSE INSTRUCTIONS

DODI 4120.11	STANDARDIZATION OF MOBILE ELECTRIC POWER (MEP) GENERATING SOURCES
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ARMY REGULATIONS

AR 70-38	RESEARCH, DEVELOPMENT, TEST AND EVALUATION OF MATERIEL FOR EXTREME CLIMATIC CONDITIONS
AR700-101	JOINT OPERATING PROCEDURES MANAGEMENT AND STANDARDIZATION OF MOBILE ELECTRIC POWER GENERATING SOURCES

CECOM LCMC PAMPHLET

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CECOM TR-98-6

EARTH GROUNDING AND BONDING PAMPHLET

DRAWINGS

13211E7541	ADAPTER ASSEMBLY, FUEL DRUM
13226E7741	DRIVER/PULLER, GROUND ROD
13230E6380	ELBOW, PIPE TO HOSE
13230E6831	EXTINGUISHER, FIRE, CARBON DIOXIDE
69-668	LINE, FUEL, AUXILIARY
88-20561-2	CLAMP, HOSE: LOW PRESSURE
88-20580	HOSE, NONMETALLIC

These documents can be downloaded at the following link:

<http://www.globalsecurity.org/military/library/policy/army/fm/5-424/index.html>.

2.3 Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. DEFINITIONS

3.1 General. The following acronyms and definitions are used in this standard.

3.2 Acronyms used in this standard. Defined acronyms follow:

- a. ABCA - American, British, Canadian, Australian (Quadripartite subset of NATO).
- b. CARC - Chemical Agent Resistant Coating.
- c. CGSA - Commercial Generator Sets and Assemblages.
- d. CON - Contingency. A Type Classification category.
- e. DED - Diesel Engine Driven.
- f. DFARS - Defense Federal Acquisition Regulation System.
- g. DoD - Department of Defense.
- h. DSN - Defense Switched Network. A military telephone system.
- i. EAT - Externally Air Transportable.
- j. EMI - Electromagnetic Interference.
- k. G - Generic. A Type Classification category.
- l. GED - Gasoline Engine Driven.
- m. GS - General Support.
- n. GTED - Gas Turbine Engine Driven.
- o. HAEMP - High Altitude Electromagnetic Pulse.

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p.	IAW -	In Accordance With.
q.	NATO -	North Atlantic Treaty Organization.
r.	NSN -	National Stock Number. A unique identifier for stocking an item.
s.	LIN -	Line Item Number.
t.	LP -	Limited Procurement. A Type Classification category.
u.	LVAD -	Low Velocity Air Drop.
v.	MEP -	Mobile Electric Power.
w.	MEPGS -	Mobile Electric Power Generating Sources.
x.	MHE -	Material Handling Equipment.
y.	MTBEFF -	Mean Time Between Essential Function Failure.
z.	MTBF -	Mean Time Between Failure.
aa.	MTBOMF -	Mean Time Between Operation and Mission Failure.
bb.	NATO -	North Atlantic Treaty Organization.
cc.	NAVFACINST -	Naval Facilities Engineering Command Instructions.
dd.	NBC -	Nuclear, Biological, and Chemical.
ee.	OBS -	Obsolete. A Type Classification category.
ff.	OEM -	On Equipment Material.
gg.	PDISE -	Power Distribution and Illumination System, Electrical.
hh.	PICA -	Primary Inventory Control Activity.
ii.	PMCS -	Preventive Maintenance, Checks and Services.
jj.	PM-MEP -	Project Manager, Mobile Electric Power.
kk.	PP -	Power Plant.
ll.	PU -	Power Unit.
mm.	PU/PP -	Power Unit/Power Plant.
nn.	QSTAG -	Quadripartite Standardization Agreement (of ABCA).
oo.	RAM -	Reliability, Availability, Maintainability.
pp.	RMS -	Root Mean Square. An averaging method.
qq.	ROC -	Required Operation Capabilities.
rr.	SSN -	Standard Study Number. A federal budget identifier for procuring an item.
ss.	STANAG -	Standardization Agreement (of NATO).
tt.	STD -	Standard. A Type Classification category.
uu.	TC -	Type Classification.
vv.	TDPs -	Technical Data Packages.

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- ww. TMDE - Test, Measurement, and Diagnostic Equipment.
 xx. TQG - Tactical Quiet Generator.
 yy. TRADOC - US Army Training and Doctrine Command.
 zz. VRLA - Valve Regulated Lead Acid Batteries.

3.3 Accessory box. An accessory box is an aluminum or steel box mounted to the Power Unit/Power Plant (PU/PP) trailer which contains ancillary equipment.

3.4 Ancillary equipment. Ancillary equipment is equipment issued with PU/PPs to support set-up, operation, or maintenance. Specific ancillary equipment is listed in [table I](#).

TABLE I Ancillary Equipment

NOMENCLATURE OR DESCRIPTION	IDENTIFYING NO.	NSN
Adapter Assembly, Fuel Drum	13211E7541	5342-00-066-1235
Clamp, Hose: Low Pressure	88-20561-2	4730-01-470-2409
Driver/Puller	13226E7741	5120-01-013-1676
Elbow, Pipe to Hose	13230E6380	4730-00-940-0947
Extinguisher, Fire, Carbon Dioxide	13230E6831	4210-01-552-7734
Hammer, Hand, Blacksmiths' or Engineers', Double Face, 8 lb		5120-00-251-4489
Hose, Nonmetallic	88-20580	4720-01-386-4210
Rods, Ground (w/Att), Sectional 9 ft	A-A-55804A	5975-00-878-3791

3.5 Bandwidth. Bandwidth is the distance between two lines drawn parallel to the axis of chart movement, one each passing through the center points of maximum and minimum trace excursion respectively during any steady-state electrical load condition. Bandwidth may refer to voltage, frequency or speed and is expressed as a percentage of rated voltage, frequency or speed.

3.6 Camouflage pattern. A camouflage pattern is a three-color pattern designed to disrupt the silhouette or outline of a piece of equipment making it difficult to distinguish the equipment from its surroundings.

3.7 Chemical Agent Resistant Coating (CARC). CARC, a polyurethane finish, is designed to be resistant to Nuclear, Biological, and Chemical (NBC) agents and allow easy clean up and decontamination. In addition, CARC is not affected by the chemical agent decontamination chemicals which would remove most other paints.

3.8 Classification. MEPGS are classified by Type, Class, and Mode as follows:

3.8.1 Type. Type defines the classification of MEPGS according to its application, weight, mobility, reliability, and life.

3.8.1.1 Type I - Tactical. Tactical MEPGS are designed for high mobility in direct support of military forces where output of generator sets is normally, but not exclusively, used at generated voltage without necessity of transformation or extensive distribution systems. Life characteristics are considered secondary to light weight, small size, and a high degree of mobility.

3.8.1.2 Type II - Prime. Prime MEPGS are designed for long term use in semi-fixed locations for extended periods of time, with size, weight, and mobility considered secondary to long life and reliability. MEPGS output is normally at high voltage for distribution purposes and requires transformation to utilization voltages at the load centers. Prime MEPGS may be expected to exceed the maximum weights for Tactical MEPGS.

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3.8.2 Class. Class defines the classification of MEPGS according to its electrical performance characteristics.

3.8.2.1 Class 1 - Precise. Precise MEPGS are designed to provide close control of voltage and frequency performance for critical applications. See table II Electrical performance characteristics parameters - alternating current generator sets of MIL-STD-1332.

3.8.2.2 Class 2 - Utility. Utility MEPGS are designed to provide power for general purpose applications. There are three grades of AC Utility power ranging from that which is equivalent to and compatible with commercial power distribution systems (Class 2A) to that needed for utilitarian purposes (Class 2C) where requirements for voltage and frequency control are minimal. See table II of MIL-STD-1332 for AC parametric values and table III of MIL-STD-1332 for DC values.

3.8.3 Mode. Mode defines the classification of MEPGS according to the frequency of its power generated.

3.8.3.1 Mode I. Mode I MEPGS are capable of operating at either 50 or 60 Hz.

3.8.3.2 Mode II. Mode II MEPGS operate at 400 Hz.

3.8.3.3 Mode III. Mode III MEPGS only operate at 60 Hz.

3.8.3.4 Mode IV. Mode IV MEPGS provide DC output.

3.9 Deviation factor. The deviation factor of a voltage waveform is the ratio of the maximum difference between corresponding ordinates of the voltage waveform and of the equivalent sine wave to the maximum ordinate of the equivalent sine wave when the waves are superimposed in such a way as to make this maximum difference as small as possible.

3.10 Dip. Voltage dip is the decrease in voltage resulting from sudden application of load to a generator set. It is measured from the mean of the observed steady-state voltage band prior to the load change to the minimum voltage excursion. Voltage dip includes the effects of voltage regulation, whereas undershoot does not.

3.11 Failure. Failure is the inability of MEPGS to perform within previously specified limits.

3.11.1 Relevant failure. A relevant failure is any failure that cannot be corrected by the operator using set controls which causes any of the following: inability to start, maintain operation, or stop; degrade performance capability below designated levels; cause serious damage to system/subsystem by continued operation; or pose a serious personnel hazard.

3.11.2 Non-relevant failures. Non-relevant failures are failures not used to compute MEPGS reliability such as:

a. Failures which do not prevent the MEPGS from meeting the specified power output requirements; e.g., a panel light burns out.

b. Failures caused by operator error where proper procedures are documented in technical manuals, instruction plates mounted on the MEPGS or both; e.g., use of improper lubricant.

c. Secondary failures caused by failures in the powered equipment or other occurrences in the environment when integral protection is not provided against such equipment failure or occurrence, e.g., explosion or fire.

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- d. Failures which may be corrected by normal operator functions, e.g., readjustment of voltage after the 4-hour long-term stability period.
- e. Failures because of characteristics of the load, e.g., waveform distortion caused by saturated inductors.
- f. Failures because of a design deficiency when subsequent testing demonstrates that the design deficiency has been corrected.
- g. Secondary failures caused by a primary failure because of a design deficiency when subsequent testing demonstrates that the design deficiency has been corrected.
- h. Failures resulting from operating items beyond requirements, e.g., if a fuel injector scheduled for replacement at 1,000 hours is run to failure in order to determine mean life, failures after 1,000 hours are non-relevant failures.

3.12 Harmonic. A harmonic is a component of a periodic quantity which is an integral multiple of the fundamental frequency. For example, a component of frequency which is twice the fundamental frequency is called the second harmonic.

3.13 Hertz (Hz). Hz is the international unit of frequency.

3.14 Line Item Number (LIN). A LIN is a six character identifier of a generic nomenclature, where the generic nomenclature is the family name of an item or group of items whose physical traits and functional abilities are sufficiently alike to meet the same operational requirements.

3.15 Mean Time Between Failure (MTBF). For exponentially distributed failures, the Mean Time Between Failure (MTBF) is the reciprocal of the failure rate. Observed MTBF is equal to the total operating time of the equipment divided by the number of relevant failures.

3.16 Mobile Electric Power Generating Sources (MEPGS). MEPGS are all mobile electric power generating sources, 840-kilowatt (kW) and smaller, which are skid mounted, trailer mounted, or man-portable that are complete equipment assemblages or part of an assemblage, and that are capable of independently producing electric power.

3.17 Observed steady-state band. The observed steady-state band is the actual bandwidth determined by test of the voltage, frequency or speed. The observed steady-state band is differentiated from the prescribed steady-state band in that the prescribed steady-state band is the maximum permitted bandwidth.

3.18 Overshoot. Overshoot is the surge increase in speed, frequency or voltage above the mean of the observed steady-state band resulting from a sudden decrease in electrical load on electrical power generating sources. Overshoot is specified as a percentage of the rated speed, frequency or voltage.

3.19 Paralleling. Paralleling is the electrical connection of two or more electrical power generating sources in order to meet a power demand greater than that supplied by any single unit or to switch from one power source to another with no break in the power supplied.

3.20 Phase balance voltage. Phase balance voltage is the difference in percent of voltage between the phases of a multi-phase electrical generating source when the source is operating at rated voltage, rated frequency, and no load.

3.21 Power Factor (PF). Power factor is the ratio of real power (watts or kilowatts) used in a circuit to the apparent power delivered to the circuit. Power Factor is expressed as:

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$$PF = \frac{\text{REAL POWER}}{\text{APPARENT POWER}}$$

3.22 Power Units/Power Plants.

3.22.1 Power Plant (PP). A power plant is a trailer mounted generator set configuration consisting of two generator sets, one or two trailers, a switch box, accessory box, and a fire extinguisher on each trailer. Individual details are provided in the Appendices.

3.22.2 Power Unit (PU). A power unit is trailer mounted generator set configuration consisting of one generator set, one trailer, accessory box, and a fire extinguisher. Individual details are provided in the characteristic data located in the Appendices.

3.22.3 Trailer chassis. All power units and power plants use standard military trailer chassis managed and type classified by the U.S. Army Tank-Automotive Command (TACOM) located in Warren, Michigan.

3.23 Primary Inventory Control Activity (PICA). PICA is the activity within the DoD designated as responsible for the functions of procurement, cataloging, depot maintenance, and disposal on an item basis.

3.24 Rated load. Rated load is the condition resulting when an electrical power generating source is operating at rated frequency, rated voltage, rated current, and rated power factor. It is normally stated as a given kilowatt value at a given power factor.

3.25 Reconnectable generator set. A reconnectable generator set has provisions for reconnecting the generator phase windings from low voltage to high voltage depending on the size and type of generator set and/or from three to single phase.

3.26 Recovery time. Recovery time is the elapsed time from the time the frequency or voltage trace leaves the prescribed steady-state band until the trace returns to and remains within the prescribed steady-state band as a result of a load change.

3.27 Regulation. Frequency regulation is the maximum difference between the no-load value of frequency and the value at any load up to and including rated load. This difference is expressed as a percentage of the rated frequency. The voltage regulation is expressed similarly except that the Root Mean Square (RMS) value of voltage is used.

3.28 Ripple voltage. Ripple voltage is the alternating component in the output voltage of a DC generator.

3.29 Rise. Voltage rise is the surge in voltage resulting from a sudden removal of load from an electrical power generating source. It is measured from the mean of the observed steady-state voltage band prior to the load change to maximum voltage excursion. Voltage rise includes the effects of voltage regulation, whereas overshoot does not.

3.30 Stability. Frequency stability describes the tendency of the frequency to remain at a constant value. Generally, the instantaneous value of frequency is not constant but varies randomly above and below a mean value. Stability may be described as either short-term or long term depending upon the length of time that the frequency is observed. Another term, bandwidth, describes the limits of these variations. Voltage stability is described similarly.

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3.31 Steady-State. Steady-state is the operating condition, at constant load, after transients have settled out.

3.32 Type Classified for Army use. Type Classification (TC) is a process by which the Army identifies the degree of acceptability of a materiel item for Army use. The TC is the Army's implementation of the DoD requirement that an item is "approved for service use" before expending procurement funds. The types of classification categories are: Standard (STD), Generic (G), Limited Procurement (LP), Contingency (CON), and Obsolete (OBS).

3.33 Undershoot. Undershoot is the surge decrease in speed, frequency, or voltage below the mean of the observed steady-state band resulting from a sudden increase in electrical load on an electrical power generating source. Undershoot is specified as a percentage of the rated speed, frequency, or voltage.

3.34 Voltage modulation. The peak value of a voltage waveform may vary with time. Voltage modulation is the difference in the absolute value of the peak voltage readings stated as a percentage of average absolute peak voltage.

4. GENERAL REQUIREMENTS

4.1 Performance. The performance requirements are developed from various requirements documents generated from the US Army Training and Doctrine Command (TRADOC) such as the Commercial Generator Sets and Assemblages (CGSA) Required Operational Capabilities (ROC) 3-100 kW. These requirements were incorporated into Purchase Descriptions for initial procurement and Military Detail Specifications for re-procurements. A summary of the requirements for MEPGS follows:

4.1.1 Noise. The MEPGS shall have an aural signature not to exceed 70 dBA at 7 meters (for the 3 kW; 75 dBA at 7 meters is required and 70 dBA at 7 meters is desired) when measured IAW table IV, MIL-STD-1474 (essential) and (all sizes) be non-detectable by an unaided soldier beyond 400 meters in fair weather with winds less than 3 MPH regardless of employment techniques (desirable).

4.1.2 Environment. The MEPGS shall be fully operable at rated load in the hot (90°F to 120°F) and basic (-25°F to 95°F) climatic design types at sea level IAW AR 70-38. Winterization kits have been developed for some MEPGS to allow operation in the cold (-35°F to -50°F) climatic design type.

4.1.3 Altitude. For MEPGS 5 kW and above: they shall be fully operable at rated load at 95°F and 4,000 ft. A derating of 3.5 % per 1,000 ft above 4,000 ft is allowable. For MEPGS below 5 kW, they shall be fully operable at rated load at 120°F and 1,000 ft.

4.1.4 Electrical performance. The MEPGS shall provide quality and type of electrical power (rated load, single phase and three phase, 4 wire, 120/208V and 0.8 power factor) in accordance with table II and IV, MIL-STD 1332 Electrical Performance Characteristic Parameters; for Alternating Current (AC) Generator Sets: a) 3 kW 60Hz, Generator Sets - Utility Class 2C; b) 5-100 kW 60 Hz and 50/60 Hz Generator Sets - Utility Class 2B. Detailed electrical performance of each MEPGS is described in the characteristic data in the Appendices.

4.1.5 Inclined operation. The MEPGS shall be operable when sited in any direction on uneven terrain with grades up to 15°.

4.1.6 Fuels, lubricants, and coolants. The MEPGS shall operate on diesel fuels and utilize lubricants and coolants conforming to current military standards. The fuels include Grade No. 1-

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D and 2-D diesel fuels conforming to A-A-52557, and JP-8 turbine fuel conforming to MIL-DTL-83133. Lubricants include oils conforming to MIL-PRF-2104 and MIL-PRF-46167. Coolants include antifreeze conforming to A-A-52624 or water with MIL-A-53009 additive.

4.1.7 Protective devices. The MEPGS shall provide for automatic shutdown for over speed and short circuit conditions. The MEPGS shall provide for automatic shutdown (with manual override) due to low fuel, low oil pressure, high temperature, and high voltage conditions. The MEPGS shall drop load for under voltage, over current, and reverse power conditions.

4.1.8 Maintenance during operation. Personnel shall be capable of checking and adding oil for MEPGS 15 kW and larger; and fuel for MEPGS 3 kW and larger, during operation.

4.1.9 Camouflage nets. The MEPGS shall meet standard electrical performance requirements when operating with thermal infrared suppression camouflage nets.

4.1.10 Storage. The MEPGS shall be storable and not damaged by hot through severe cold temperatures IAW AR 70-38.

4.1.11 Preventive Maintenance Checks and Services (PMCS). Personnel shall be able to change the oil during scheduled services within 20 minutes. The MEPGS shall be equipped with a means of bleeding the fuel system of air/water during pre and post operation checks. The MEPGS shall have solderless connections.

4.1.12 Fuel capacity. The MEPGS shall include an onboard fuel tank for skid mounted MEPGS capable of supporting 8 hours of continuous operations at rated loads except for the 3 kW MEPGS which will support 1 hour minimum (up to 8 hours desired) of continuous operation.

4.1.13 Auxiliary fuel system. The MEPGS shall be capable of operating from external fuel sources.

4.1.14 Supportability. The MEPGS shall be supportable by standard test, measurement, and diagnostic equipment (TMDE) and not require additional or special tools or TMDE.

4.1.15 Starting system. The MEPGS shall contain a 24 volt cranking system. The MEPGS shall contain a battery charging system for MEPGS 3 kW and above.

4.1.16 NATO slave receptacle. The MEPGS shall be equipped for slave starting using a standard NATO receptacle.

4.1.17 Instrumentation. The MEPGS shall be equipped with devices necessary to monitor operating conditions and indicate a faulty condition which may cause set malfunctions and shutdowns.

4.1.18 Adjustments. The MEPGS shall permit operator adjustment of voltage output and frequency. Each MEPGS has an emergency stop switch.

4.1.19 Parallel operation. The MEPGS shall be capable of parallel operations for sets 15 kW and larger.

4.1.20 High Altitude Electromagnetic Pulse (HAEMP). The MEPGS shall survive effects of HAEMP.

4.1.21 Electromagnetic Interference (EMI). The MEPGS shall not emit nor be susceptible to EMI signals.

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4.1.22 Transportability. The MEPGS are issued as Skid Mounted, trailer mounted Power Units (PU) and trailer mounted Power Plants (PP). These configurations must be:

- a. Marine, rail, highway and air transportable.
- b. Towable in trailer mounted configurations with ancillary equipment by standard military prime mover based on the weight of the configurations. Individual prime movers are detailed in the characteristic data in the Appendices.
- c. Externally air transportable (EAT) by army utility or medium rotary wing aircraft (3 kW through 60 kW) and internally by C-130 and larger USAF aircraft (the 3 kW Skid Mounted MEPGS must also be internally transportable in Army utility rotary wing aircraft).
- d. Air deliverable by low velocity air drop (LVAD) 3 kW – 100 kW.
- e. Man-soldier portable (desired) for the 3 kW Skid Mounted MEPGS (if soldier portable, 4 soldier desired, no more than 6 soldier required).
- f. Equipped with the necessary lifting and tie down provisions to support all of the above transportation requirements.
- g. Equipped with fork lift openings suitable for standard Material Handling Equipment (MHE).

4.1.23 Reliability, Availability, Maintainability (RAM). The requirements on the table below are general requirements. The actual numbers are provided in the characteristic data in the Appendices.

TABLE II General Reliability, Availability and Maintainability Requirements

Reliability	3 kW	5 kW	10 kW	15 kW	30 kW	60 kW	100 kW
MTBOMF (Hr)	500	500	600	600	600	600	600
Maintainability							
MR Org	.036	.036	.040	.040	.040	.040	.040
MR DS	.020	.020	.022	.022	.022	.023	.023
MR GS	.016	.016	.016	.017	.017	.018	.020
Availability							
Ao (War)	.940	.940	.940	.940	.940	.940	.940
Ao (Peace)	.940	.940	.940	.940	.940	.940	.940

4.2 Service Specific Power Distribution Systems.

4.2.1 Army Supported Power Distribution and Illumination System, Electrical (PDISE). PDISE is a family of five end items; consisting of two feeder systems, two distribution systems, and a utility receptacle and lighting system designed to distribute power from MEPGS to the user. Information on the PDISE is contained in Appendix B.

4.2.1.1 Feeder Systems. PDISE has two feeder systems. These feeder systems will subdivide and distribute 3 phase, 120/208 volt power from a single power source to multiple distribution systems. The M200 is a 200 amp per phase system. The M100 is a 100 amp per phase system. Each system consists of a feeder center, circuit breaker box with military standard input and output connectors, with appropriate military standard connectors and military standard cabling.

4.2.1.2 Distribution Systems. PDISE has two distribution systems. These distribution systems will subdivide and distribute 3 phase or single phase, 120/208 volt power from a single power source to multiple single phase 20 A circuits.

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4.2.1.2.1 M40 Distribution System. The M40 distribution system is a three phase, 40 amp/phase distribution system consisting of a housed circuit breaker system used to distribute 120/208 V, 3 phase power from a feeder system or MEPGS to any 120V single phase loads.

4.2.1.2.2 M60 Distribution System. The M60 distribution system is a single phase, 120 V, 60 amp distribution system consisting of a housed circuit breaker system used to distribute from a MEPGS to any 120V single phase loads. The M60 does not interface with either feeder system or the 40 amp distribution system (M40).

4.2.1.2.3 Utility Receptacle and Illumination Kit. PDISE utility receptacle and illumination kit (M46) is a set of power cords, light sets, and duplex boxes that can be connected to a distribution system to provide power and light. PDISE utility receptacle and illumination kit has no self protection and should only be used with one of the PDISE distribution systems (M40 or M60). PDISE utility receptacle and illumination kit provides internal tent and shelter wiring and lighting.

4.2.1.2.4 Power Distribution System, Electrical (PDISE) Interface. PDISE contains an interface cable that allows the system to be connected to the power source using a split lug connection. Within the PDISE system, all electrical connections are made by connectors conforming to MIL-DTL-22992. PDISE provides standard 20 amp, single phase, duplex type connections for individual circuits used by the load. Larger loads can be connected to the PDISE feeder systems using the proper MIL-DTL-22992 connectors.

4.2.1.2.5 PDISE implementation. The Army supported PDISE should be issued based on the user's power requirements. The number and types of power generating sources available and the details of the user's power requirements will be the driving factors in determining how to employ PDISE. PDISE is a flexible system and no single solution is a "best" solution. A typical implementation is presented in [figure 1](#). PDISE is not necessarily issued on the basis of the MEPGS size. In some design applications, the PDISE total circuit capability can be much less than the MEPGS kW rating and in other applications, it can be much greater.

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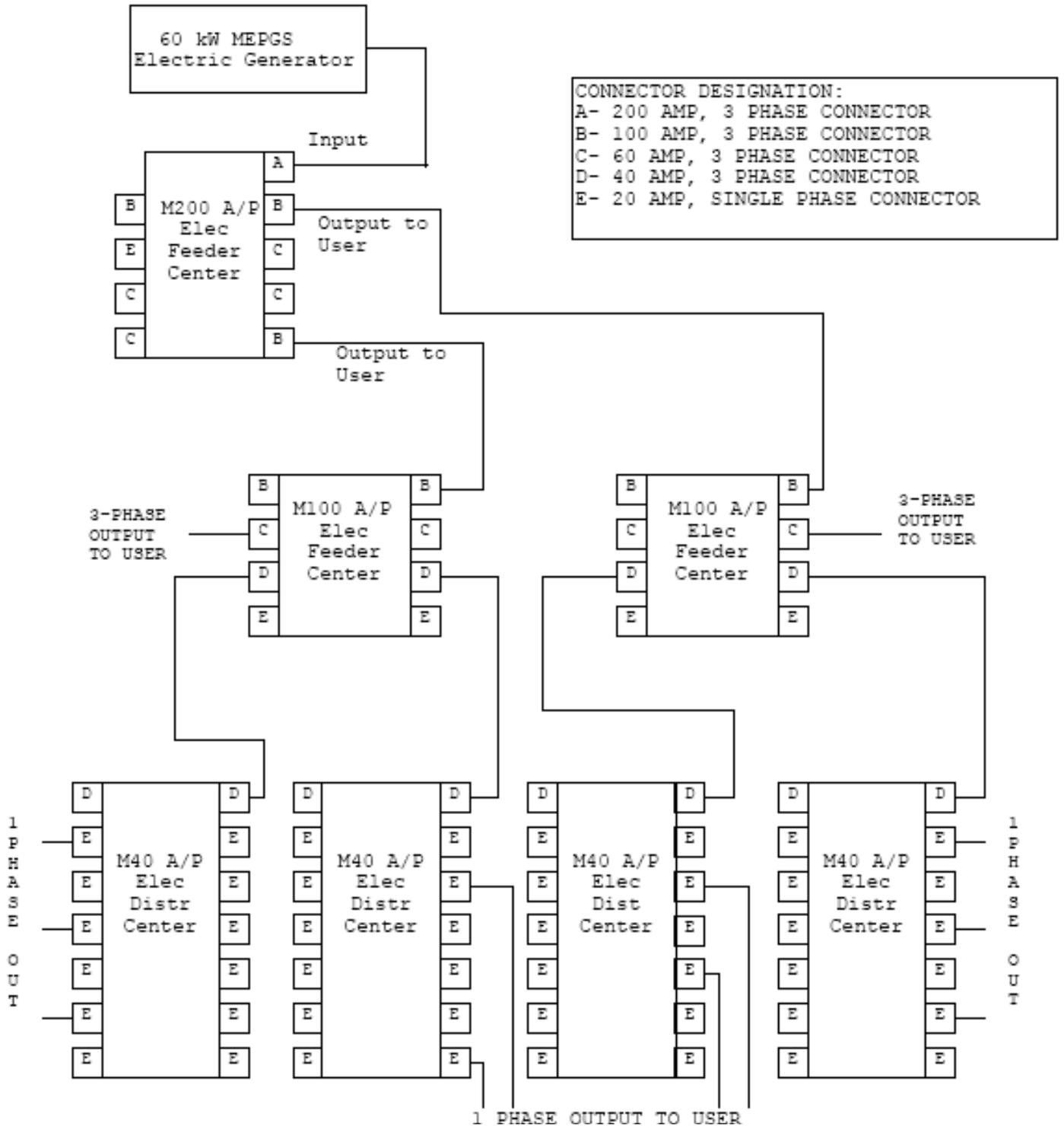


FIGURE 1 Sample of a possible distribution arrangement

4.2.1.2.6 Voltage drop considerations for the Army Supported PDISE. Voltage drop, caused by resistance in cabling, will limit the distance to which the power can be distributed. Generally, full rated power can be distributed about 100 feet from a distribution center and up to 200 feet from a feeder system, for a total of about 300 feet. [Table III](#) below provides voltage drops for various cable size and length combinations. The voltage drops tabulated are for rated current.

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Since voltage drops are proportional to the current, 50% of rated load would produce 50% of the drop listed in the table.

TABLE III Approximate voltage losses at rated amperage*

Rated amperage/no. of pins	Cable length in feet					
	15	25	50	100	200	300
200 amp/8 pin cables (3-phase)	1 V	1.6 V	3.2 V	6.4 V	12.8 V	19.2 V
100 amp/8 pin cables (3-phase)	0.4 V	0.7 V	1.4 V	2.8 V	5.6 V	8.4 V
60 amp/5 pin cables (3-phase)	0.5 V	0.9 V	1.6 V	3.5 V	6.4 V	10.5 V
40 amp/5 pin cables (3-phase)	0.3 V	0.6 V	1.1 V	2.3 V	4.4 V	6.9 V
60 amp/4 pin cables (1-phase)	0.5 V	0.9 V	1.7 V	3.4 V	6.8 V	10.2 V
20 amp/3 pin cables (1-phase)	1.1 V	1.8 V	3.6 V	7.2 V	14.4 V	21.6 V

*Actual voltage drop will be affected by temperature and the quality of the connection made when mating the connectors (dirt, corrosion, and oil affect pin resistance).

4.2.1.2.7 Phase balance for the Army Supported PDISE. Phase balance must be considered when connecting single phase loads to a 3-phase generator. If a phase is unbalanced by more than 10% it can cause damage to the power generation source.

4.2.1.2.8 Universal Adapter for the Army Supported PDISE. The universal adapter is of particular value and is shown in the Appendices. The adapter is designed to connect electrical equipment, with an electrical connection not supported by PDISE, to PDISE. It consists of a box with a three-phase 40/60 ampere connector and five split-lug terminals. The universal adapter also enables users not having the required connectors for the 40 and 60 ampere outlets on the M100 and M200 feeder systems, or the feed-thru on the 40 ampere distribution system, to hook up to PDISE.

4.2.1.3 Marine Supported Power Distribution Box (PDB). Information on the Marine supported PDB is contained in Appendix B.

4.2.1.4 Navy Supported Power Distribution Systems. Information on the Navy supported Power Distribution Systems is contained in Appendix B.

4.2.2 Interfaces. The following paragraphs provide the general interfaces for the DoD Standard Family of MEPGS. Specific interfaces are described in the characteristic data in Appendix B.

4.2.2.1 Electrical Interface. All MEPGS, 5 kW and above, are connected to the load based on a 5 wire system for 3 phase 120/208 V configuration. Each MEPGS contains a load terminal board with 5 split lug terminals to connect the load cable. All load terminal boards have a GND terminal used to bond the equipment to the MEPGS and ground them to earth ground. All load terminal boards have an N terminal for the neutral connection. All load terminal boards have one load terminal for each phase marked L1, L2, & L3. All MEPGS, 3 kW and below, are single phase and contain the same GND and N terminals as the rest of the fleet. They also have either one or two load terminals, L1 or L2, based on the voltage capability. The voltage connections and terminal descriptions are provided in the characteristic data in the Appendices.

4.2.2.2 Convenience receptacle. Each set has a standard duplex receptacle, rated at 15 A, with ground fault circuit interrupter (GFCI) protection.

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4.2.2.3 Trailer interface. Each MEPGS, 3 kW and above, has mounting holes in the skid base to enable the MEPGS to be mounted on a trailer or other locations. Specific locations are detailed in the characteristic data located in the Appendices.

4.2.2.4 Primary fuel interface. The onboard fuel tanks have been designed to be filled with the standard fuel nozzles used on fuel trucks and fuel cans.

4.2.2.5 Auxiliary fuel interface. Each MEPGS, 3 kW and above, has an auxiliary fuel system interface built in. MEPGS are issued with an auxiliary fuel hose that can be connected between the auxiliary fuel fitting on the power generating source and an auxiliary fuel source. After connection of the hose and activation of the switch on the control panel, fuel will be automatically transferred to the MEPGS fuel tank from an additional fuel source. PU/PPs have an auxiliary fuel adapter provided that allows the fuel to be withdrawn from a standard 5 gallon can or a 55 gallon drum.

4.2.3 Human interface. All MEPGS have been designed to the human factors criteria of MIL-STD-1472, Design Criteria Standard Human Engineering.

4.2.4 Logistical interface. All MEPGS are organically supported through the standard DoD supply system.

4.2.5 Dimensions and weight. The dimensions and weight requirements for MEPGS are derived from the various transportability requirements. Specific dimensions and weights are provided in the characteristic data in the Appendices.

4.2.6 Camouflage nets. All MEPGS, except the 2 kW MTG, allow the engine exhaust gases and cooling air to exit through the top of the sets. This design prevents thermal hot spots from being developed on the sides of the thermal infrared suppression camouflage nets.

4.2.7 Exhaust outlet. All MEPGS, 5 kW and above, are equipped with an exhaust outlet that terminates with a standard National Pipe Thread accessible from the outside of the set.

4.2.8 Safety. All MEPGS have been designed to meet the provisions of MIL-STD-882, Standard Practice for System Safety.

4.2.8.1 Grounding. Electrical power generating and distribution systems must be properly grounded to prevent hazards to users. Techniques for grounding power generating systems are included in FM 5-424, Electric Power Generation in the Field and CECOM TR-98-6 Earth Grounding and Bonding Pamphlet. A three-piece sectional ground system is provided with each MEPGS and is also available in the DoD supply system.

4.2.8.2 Fire Protection. Adequate fire protection must be provided in the area in which the MEPGS will be used. A fire extinguisher, NSN: 4210-00-270-4512, is recommended.

4.2.8.3 Noise Protection. Adequate hearing protection must be utilized in the vicinity of some operating MEPGS. See characteristic data for specific audio noise levels. Prolonged exposure to the high intensity noise produced by some operating MEPGS can cause permanent hearing damage or complete loss of hearing. Operation of the Tactical Quiet Generator (TQG) sets and other quiet MEPGS do not require hearing protection as long as the acoustic panels are not opened or removed.

4.3 Delivered condition. Details of delivered condition, optional equipment, and accessories are below.

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4.3.1 **Finish.** All DoD Standard Family of MEPGS are provided with a Green 383 topcoat of Chemical Agent Resistant Coating (CARC), applied in accordance with MIL-DTL-53072. If desired, a three color camouflage pattern is available for all MEPGS 5 kW and above. This pattern has available colors for 3 different environments, Woodlands, Desert, and Arctic.

4.3.2 **Skid Mounted MEPGS.**

4.3.2.1 **Safety items.** All Skid Mounted MEPGS are delivered with a three piece grounding system, (NSN 5975-00-878-3791).

4.3.2.2 **Batteries.** All Skid Mounted MEPGS, 3 kW and above, are provided with batteries. These batteries are either Valve Regulated Lead Acid Batteries (VRLA) or dry charged lead-acid batteries.

TABLE IV Batteries Applications

BATTERIES		
MODEL	DESCRIPTION	APPLICATION
Concord RG-24-15A1	VRLA – 24 Volt	3 kW TQG
4HN	Dry Charged Lead-Acid – 24 Volt	3 kW TQG
2HN	Dry Charged Lead-Acid – 12 Volt	5 kW TQG
6TMF	Dry Charged Lead-Acid – 12 Volt	15 kW - 60 kW TQG
Optima D51R	VRLA – 12 Volt	5 kW TQG
Optima 800S/U	VRLA – 12 Volt	10, 15, 30, 60 kW TQG
Optima 8050-160	VRLA – 12 Volt	100 and 200 kW TQG

4.3.2.3 **Auxiliary fuel line.** A 25 foot auxiliary fuel line is furnished with the 3 kW through 200 kW DoD Standard Family of MEPGS. Auxiliary fuel lines for other MEPGS may be ordered or fabricated on site in accordance with drawing 69-668, titled “Line, Fuel, Auxiliary”, see [figure 2](#) below.

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4.3.2.4 Starting aids. All sets have provisions to allow starting of the MEPGS from a temperature of -25°F and above. MEPGS, 5 kW and above, have a winterization kit available that will allow them to start and operate down to -50°F. Details of the starting systems are provided in the characteristic data in the Appendices.

4.3.2.5 Paralleling cables. Paralleling cables are provided with MEPGS, 15 through 750 kW. MEPGS can only be paralleled to MEPGS of the same model and mode.

4.3.3 Power Units/Power Plants (PU/PP).

4.3.3.1 Power Units. Each Power Unit (PU) contains an accessory box with the ancillary equipment described in [table I](#). Details are included in the characteristic data in the Appendices.

4.3.3.2 Power Plants. Each Power Plant (PP) trailer contains an accessory box with the ancillary equipment described in [table I](#). In addition, the PP contains a switchbox and all of the cabling necessary to, depending on the size of the MEPGS, switch loads between MEPGS or operate two MEPGS in parallel without interrupting power to the load. Details are included in the characteristic data in the Appendices.

5. DETAILED REQUIREMENTS.

5.1 DoD Standard Family of Mobile Electric Power Generating Sources. The DoD Standard Family of MEPGS is defined in [table V](#) below. Individual characteristic data for these MEPGS are provided in Appendix A. Adequate physical descriptions and performance characteristics to permit selection of the item best suited for a specific application are included in this data. In addition, photographs and outline drawings are included to facilitate application planning.

TABLE V DoD Standard Family of Mobile Electric Power Generating Sources

SIZE	ITEM DESCRIPTION	MODEL	NSN	LIN	SSN
2 kW	MTG 28 VDC, DED, Tubular Frame	MEP-501A	6115-01-435-1567	G36169	M59400
	MTG 60 Hz, DED, Tubular Frame	MEP-531A	6115-01-435-1565	G36237	M59400
3 kW	TQG 60 Hz, DED, Skid Mounted	MEP-831A	6115-01-285-3012	G18358	M59400
	TQG 400 Hz, DED, Skid Mounted	MEP-832A	6115-01-287-2431	G74847	M59400
	TQG Power Plant, 60 Hz	PP-AN/MJQ-42	6115-01-322-8583	P42466	R62700
	TQG Power Plant, 60 Hz	PP-AN/MJQ-43A	6115-01-322-8582	P42534	R62700
5 kW	TQG 60 Hz, DED, Skid Mounted	MEP-802A	6115-01-274-7387	G11966	M53500
	TQG 400 Hz, DED, Skid Mounted	MEP-812A	6115-01-274-7391	G12102	M53500
	TQG Power Unit, 60 Hz	PU-797A	6115-01-413-3820	G42238	R62700
	TQG Power Plant, 60 Hz	PP-AN/MJQ-35A	6115-01-414-9697	P28083	R62700
	TQG Power Plant, 60 Hz	PP-AN/MJQ-36	6115-01-313-4215	P28151	R62700
10 kW	TQG 60 Hz, DED, Skid Mounted	MEP-803A	6115-01-275-5061	G74711	M53500
	TQG 400 Hz, DED, Skid Mounted	MEP-813A	6115-01-274-7392	G74779	M53500
	TQG Power Unit, 60 Hz	PU-798A	6115-01-413-3818	G42170	R62700
	TQG Power Unit, 400 Hz	PU-799A	6115-01-413-3819	G53403	R62700
	TQG Power Plant, 60 Hz	PP-AN/MJQ-37	6115-01-299-6035	P42262	R62700
	TQG Power Plant, 400 Hz	PP-AN/MJQ-38	6115-01-313-4214	P42330	R62700

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TABLE V DoD Standard Family of Mobile Electric Power Generating Sources - Continued.

SIZE	ITEM DESCRIPTION	MODEL	NSN	LIN	SSN
15 kW	TQG 50/60 Hz, DED, Skid Mounted	MEP-804B	6115-01-530-1458	G12170	M53500
	TQG 400 Hz, DED, Skid Mounted	MEP-814B	6115-01-529-9494	G12238	M53500
	TQG Power Unit, 400 Hz	PU-800A	6115-01-565-0929	G78203	R62700
	TQG Power Unit, 50/60 Hz	PU-801B	6115-01-565-0874	G78374	R62700
	TQG Power Unit, 50/60 Hz	PU-802A	6115-01-565-1576	G53778	R62700
	TQG Power Plant, 400 Hz	PP-AN/MJQ-39B	6115-01-565-0701	P42614	R62700
	TQG Power Plant, 50/60 Hz	PP-AN/MJQ-48B	6115-01-565-0691	P63530	R62700
30 kW	TQG 50/60 Hz, DED, Skid Mounted	MEP-805B	6115-01-461-9335	G74575	M53500
	TQG 400 Hz, DED, Skid Mounted	MEP-815B	6115-01-462-0290	G74643	M53500
	TQG Power Unit, 50/60 Hz	PU-803B	6115-01-470-6376	G35851	R62700
	TQG Power Unit, 400 Hz	PU-804B	6115-01-471-1507	G35919	R62700
	TQG Power Plant, 50/60 Hz	PP-AN/MJQ-40B	6115-01-474-3783	P42126	R62700
60 kW	TQG 50/60 Hz, DED, Skid Mounted	MEP-806B	6115-01-462-0291	G12034	M53500
	TQG 400 Hz, DED, Skid Mounted	MEP-816B	6115-01-462-0292	G18052	M53500
	TQG Power Unit, 50/60 Hz	PU-805B	6115-01-471-1508	G78306	R62700
	TQG Power Unit, 400 Hz	PU-806B	6115-01-471-1506	G17460	R62700
	TQG Power Plant, 50/60 Hz	PP-AN/MJQ-41B	6115-01-474-3776	P42194	R62700
	TQG Power Plant, 400 Hz	PP-AN.MJQ-1612	6115-01-349-1536	N/A	R62700
	TQG Power Plant, 50/60 Hz	PP-AN/MJQ-1632	6115-01-346-0157	N/A	R62700
100 kW	TQG 50/60 Hz, DED, Skid Mounted	MEP-807A	6115-01-296-1463	G17596	M54400
	TQG Power Unit, 50/60 Hz	PU-807A	6115-01-471-7088	G17528	M54400
200 kW	TQG 50/60 Hz, DED, Skid Mounted	MEP-809A	6115-01-296-1462	G17664	M54400
	TQG Power Unit, 50/60 Hz	PU-809A	6115-01-471-7085	G26395	M54400
750 kW	DPGDS, 50/60 Hz, DED	MEP-810B	6115-01-486-4032	G17800	M54400

5.2 Service Specific Power Distribution Systems.5.2.1 Army Supported Power Distribution Illumination Systems, Electrical (PDISE).

Power Distribution Illumination Systems, Electrical (PDISE) is defined in [table VI](#) below.

Individual characteristic data for PDISE are provided in Appendix B. Adequate physical descriptions and performance characteristics to permit selection of the item(s) best suited for a specific application are included in this data. In addition, photographs and outline drawings are included to facilitate application planning.

TABLE VI Army Supported Power Distribution, Illumination System, Electrical (PDISE)

ITEM DESCRIPTION	MODEL NO.	NSN	LIN	SSN
200 amp/phase Feeder Sys - 3 Phase	M200 A/P	6150-01-308-5672	F55689	R45400
100 amp/phase Feeder Sys - 3 Phase	M100 A/P	6150-01-308-5671	F55621	R45400
40 amp/phase Dist Sys - 3 Phase	M40 A/P	6150-01-307-9446	F55485	R45400
60 amp Dist Sys - 1 Phase	M60 A/P	6150-01-307-9445	F55553	R45400
Electrical Kit, Utility Receptacle	M46	6150-01-208-9751	U89185	R45400

5.2.2 Marine Supported Power Distribution Box (PDB). The PDB is defined in [table VII](#) below. Individual characteristic data for PDB are provided in Appendix B. Adequate

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physical descriptions and performance characteristics to permit selection of the item(s) best suited for a specific application are included in this data. In addition, photographs and outline drawings are included to facilitate application planning.

TABLE VII Marine Supported PDB

ITEM DESCRIPTION	MODEL NO.	NSN
MEPDIS-R-5 kW Outdoor PDB	DB-30NA-A22-S3	6110-01-532-1821
MEPDIS-R-5 kW Indoor PDB	DB-30NA-AQQ-S3	6110-01-532-1794
MEPDIS-R-15kW PDB	DB-30MA-F22QS3	6110-01-532-1764
MEPDIS-R-30kW PDB	DB100MA-P22QS3	6110-01-532-1809
MEPDIS-R-100kW PDB	DB350MA-P2WAS3	6110-01-532-1835
MEPDIS-R-300kW PDB	DB350MA-P2WQS	6110-01-532-1776

5.2.3 Navy Supported Power Distribution Systems. The Navy supported Systems are defined in [table VIII](#) below. Individual characteristic data for the systems are provided in Appendix B. Adequate physical descriptions and performance characteristics to permit selection of the item(s) best suited for a specific application are included in this data. In addition, photographs and outline drawings are included to facilitate application planning.

TABLE VIII Navy Supported PDB

ITEM DESCRIPTION	MODEL NO.	NSN
480-208Y/120VA 15kVA Portable Distribution Center	ASSEMBLY 30208	6110-00-186-2542
480-208Y/120VA 30kVAPortable Distribution Center	ASSEMBLY 30209	6110-01-186-2537
Panel Distribution 200Amp 120V 3PH 5-Wire LEX	ASSEMBLY 30030	6110-01-554-7406
Distribution Center Portable 208Y/120V 60 Amp (15kW)	ASSEMBLY 30133	6110-01-236-3829
GFI 10kW-208/120V 3 Phase 30 Amps Distribution Center Portable	ASSEMBLY 30211	6110-00-205-1637
480V 3 Phase 400 Amps Weatherproof Panel board Assembly Portable	ASSEMBLY 32600	6110-00-186-6623
Panel Power Distribution Box 200 Amp (60kW)	PWR DIST PNL 60 kW	6110-01-236-4637

5.3 Parametric values. The parametric values cited within the characteristic data are the minimum or maximum allowable limits over the specified environmental range. Specified parametric values were determined using the test procedures delineated in MIL-STD-705, Generator Sets, Engine Driven Methods of Tests and Instructions. For a more complete description, see applicable specifications, drawings, and referenced documents.

5.4 Technical Data Packages. The design and performance of the DoD Standard Family of MEPGS and PDISE are defined by Technical Data Packages (TDPs) made up of Detail Specifications or Purchased Descriptions, and drawings. PM-MEP provides configuration

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management of these TDPs. Any issues with the design or performance of the DoD Standard Family of MEPGS should be addressed to PM-MEP at:

Project Manager - Mobile Electric Power
5850 Delafield Road, Bldg 324
Fort Belvoir, Virginia 22060-5809
Phone: (703)704-3162, DSN: 654-3162
Fax: (703)704-3257, DSN: 654-3257
Website: <http://www.pm-mep.army.mil>
Email: See website

6. ITEMS OF NOTE

(This section contains information of a general or explanatory nature that may be helpful, but not mandatory.)

6.1 Intended use. This standard has been prepared to assist the DoD Project Manager - Mobile Electric Power (PM-MEP) in effectively managing and standardizing Mobile Electric Power Generating Sources (MEPGS) within the DoD. Also, this standard has been prepared for use by all Departments and Agencies of the DoD to select DoD standard MEPGS and ancillary equipment for applications requiring mobile sources of electric power.

6.2 Acquisition requirements. Acquisition documents should specify the title, number and date of this specification.

6.3 National Stock Numbers (NSN). National Stock Numbers for MEPGS are listed in [table V](#), and NSNs for the service specific Power Distribution Systems are listed in [table VI](#), [table VII](#), and [table VIII](#).

6.4 MEPGS availability. To determine the availability of desired generator sets or associated equipment and to assure proper and timely acquisition of MEPGS, users of this standard are advised to contact PM-MEP at:

Project Manager - Mobile Electric Power
5850 Delafield Road, Bldg 324
Fort Belvoir, Virginia 22060-5809
Phone: (703)704-3162, DSN: 654-3162
Fax: (703)704-3257, DSN: 654-3257
Website: <http://www.pm-mep.army.mil>
Email: See website

6.5 MEPGS Development Program. The MEPGS development programs are managed by the DoD Project Manager - Mobile Electric Power. If users of this standard cannot find a suitable generator set within the DoD Standard Family of MEPGS as presented in this Standard, they are advised to contact PM-MEP ([see 6.4](#)). The PM-MEP office can obtain status of any development program(s) and determine if a suitable power source will be available when needed.

6.6 Items not Army Type-Classified. Army Type-Classification ([see 3.32](#)) is a procedure described by AR 70-1 to designate Army materiel acquisition status. Some mobile electric power generating sources included in this document have not been Type-Classified for Army use and are identified by "Not Type-Classified for Army Use." These items have been approved for use by other service(s). Other items, such as the Auxiliary Power Units (APUs), have been Army Type-

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Classified as part of a larger system and are not separately fielded. These items are identified by "Not Separately Type-Classified."

6.7 Non-procurable MEPGS. Appendix C provides characteristic data for non-procurable MEPGS. Information is provided for historical record only.

6.8 Subject term (key word) listing.

- Auxiliary Power
- Generator set
- Power Plant
- Power Unit
- Power Distribution

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APPENDIX A

DoD Standard Family of Mobile Electric Power Generating Sources

A.1 SCOPE

A.1.1 Scope. This Appendix provides the characteristic data for the current DoD Standard Family of Mobile Electric Power Generating Sources (MEPGS). DoD Directive 4120.11 requires DoD activities to use these MEPGS as power sources for their systems. Data contained in this Appendix is provided to assist the materiel developer in selecting the proper MEPGS for use. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

A.2 GENERAL DESCRIPTIONS

A.2.1 Item Descriptions.

A.2.1.1 Military Tactical Generator (MTG). The MTG is a 2 kW diesel engine driven generator set used to meet user requirements of less than 3 kW power. The MTG was introduced into the US military system through the DoD Foreign Comparative Test (FTC) program. It is small, light weight, relatively quiet, and available in 60 Hz, 120V, single phase, and in 28 VDC versions.

A.2.1.2 Tactical Quiet Generator (TQG). The TQGs are reliable, quiet, and light weight diesel engine driven generator sets in the 3 kW to 200 kW range. The TQGs incorporate commercial components engineered to meet military requirements and are procured in large quantities so they are relatively inexpensive.

A.2.1.3 Deployable Power Generation and Distribution System (DPGDS). The DPGDS is diesel engine driven and generates 750 kW, 3 phase, 3800/4160 V, 50/60 Hz power. DPGDS replaces the 500 kW and 750 kW Military Standard generator sets.

A.2.1.4 Trailers. Several trailers are used in Power Unit and Power Plant MEPGS systems depending on size, weight and configuration.

a. Light Tactical Trailer (LTT). The LTT is a 1-1/2 ton trailer designed to match the cross country mobility of the High Mobility Multipurpose Wheeled Vehicle (HMMWV) while carrying a full payload.

b. M103A3. The M103A3 is a 1-1/2 ton trailer modified to carry the extra weight of a generator set(s) and associated hardware.

c. M200A1. The M200A1 is a 2-1/2 ton trailer modified to carry the extra weight of a generator set and associated hardware. The trailer is now configured with single radial tires in lieu of the dual bias tires although both configurations are presently in the field.

d. M1061A1. The M1061A1 is a 5 ton trailer.

A.3 DETAILED DESCRIPTIONS

A.3.1 Detailed descriptions. Detailed descriptions are contained in the Characteristic Data paragraphs, summarized in [table A-I](#), arranged by power rating capacity.

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TABLE A-I Guide to the Characteristic Data

SIZE	Paragraph	ITEM DESCRIPTION	MODEL NO.	FIG	PAGE
2 kW	A.3.1.1	MTG 28 VDC, DED, Tubular Frame	MEP-501A	FIGURE A-1	27
		MTG 60 Hz, DED, Tubular Frame	MEP-531A	FIGURE A-1	27
3 kW	A.3.1.2	TQG 60 Hz, DED, Skid Mounted	MEP-831A	FIGURE A-2	29
		TQG 400 Hz, DED, Skid Mounted	MEP-832A	FIGURE A-2	29
		TQG Power Plant, 60 Hz	PP-AN/MJQ-42	FIGURE A-3	30
		TQG Power Plant, 60 Hz	PP-AN/MJQ-43A	FIGURE A-4	31
5 kW	A.3.1.3	TQG 60 Hz, DED, Skid Mounted	MEP-802A	FIGURE A-5	33
		TQG 400 Hz, DED, Skid Mounted	MEP-812A	FIGURE A-5	33
		TQG Power Unit, 60 Hz	PU-797A	FIGURE A-6	34
		TQG Power Plant, 60 Hz	PP-AN/MJQ-35A	FIGURE A-7	35
		TQG Power Plant, 60 Hz	PP-AN/MJQ-36	FIGURE A-8	36
10 kW	A.3.1.4	TQG 60 Hz, DED, Skid Mounted	MEP-803A	FIGURE A-9	39
		TQG 400 Hz, DED, Skid Mounted	MEP-813A	FIGURE A-9	39
		TQG Power Unit, 60 Hz	PU-798A	FIGURE A-10	40
		TQG Power Unit, 400 Hz	PU-799A	FIGURE A-11	41
		TQG Power Plant, 60 Hz	PP-AN/MJQ-37	FIGURE A-12	42
		TQG Power Plant, 400 Hz	PP-AN/MJQ-38	FIGURE A-13	43
15 kW	A.3.1.5	TQG 50/60 Hz, DED, Skid Mounted	MEP-804B	FIGURE A-14	45
		TQG 400 Hz, DED, Skid Mounted	MEP-814B	FIGURE A-14	45
		TQG Power Unit, 400 Hz	PU-800A	FIGURE A-15	46
		TQG Power Unit, 50/60 Hz	PU-801B	FIGURE A-16	47
		TQG Power Unit, 50/60 Hz	PU-802A	FIGURE A-17	48
		TQG Power Plant, 400 Hz	PP-AN/MJQ-39B	FIGURE A-18	49
		TQG Power Plant, 50/60 Hz	PP-AN/MJQ-48B	FIGURE A-19	50
30 kW	A.3.1.6	TQG 50/60 Hz, DED, Skid Mounted	MEP-805B	FIGURE A-20	53
		TQG 400 Hz, DED, Skid Mounted	MEP-815B	FIGURE A-20	53
		TQG Power Unit, 50/60 Hz	PU-803B	FIGURE A-21	54
		TQG Power Unit, 400 Hz	PU-804B	FIGURE A-22	55
		TQG Power Plant, 50/60 Hz	PP-AN/MJQ-40B	FIGURE A-23	56
60 kW	A.3.1.7	TQG 50/60 Hz, DED, Skid Mounted	MEP-806B	FIGURE A-24	59
		TQG 400 Hz, DED, Skid Mounted	MEP-816B	FIGURE A-24	59
		TQG Power Unit, 50/60 Hz	PU-805B	FIGURE A-25	60
		TQG Power Unit, 400 Hz	PU-806B	FIGURE A-26	61
		TQG Power Plant, 50/60 Hz	PP-AN/MJQ-41B	FIGURE A-27	62
		TQG Power Plant, 400 Hz	PP-AN/MJQ-1612	FIGURE A-28	63
		TQG Power Plant, 50/60 Hz	PP-AN/MJQ-1632	FIGURE A-29	64
100 kW	A.3.1.8	TQG 50/60 Hz, DED, Skid Mounted	MEP-807A	FIGURE A-30	67
		TQG Power Unit, 50/60 Hz	PU-807A	FIGURE A-31	68
200 kW	A.3.1.9	TQG 50/60 Hz, DED, Skid Mounted	MEP-809A	FIGURE A-32	71
		TQG Power Unit, 50/60 Hz	PU-809A	FIGURE A-33	72
750 kW	A.3.1.10	DPGDS, 50/60 Hz, DED	MEP-810B	FIGURE A-34	75

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A.3.1.1 Military Tactical Generator Set, DED, 2 kW

TABLE A-I Characteristic Data for MEP-531A and MEP-501A

Identification Data			
Model	MEP-531A		MEP-501A
Description	2 kW MTG Set, 60 Hz, DED, Tubular Frame		2 kW MTG Set, 28 VDC, DED, Tubular Frame
NSN	6115-01-435-1565		6115-01-435-1567
LIN	G36237		G36169
SSN	M59400		M59400
Physical Characteristic			
Dimensions LWH (in)	30 x 16 x 22		
Ship Cube (ft ³)	6		
Wet Weight (lbs)	158	138	
Engine	Yanmar L48AE-DEG Diesel, 1 cylinder/4 stroke, 4.2 horsepower @ 3600 RPM, air cooled, 24 VDC start from NATO slave receptacle, recoil pull starter.		
Instrumentation	Voltmeter, ammeter, hour meter, frequency meter (AC only).		
Fuels	Diesel DL-1, DL-2 and JP-8		
Fuel Tank Capacity (Gal)	1.6		
Performance Characteristic			
Power Rating	2kW, 1.0 pf @4000 ft/95°F. Derate: 1.3%/328 ft from 4000 to 8000 ft		
Environmental Capability	-40°F to 120°F, rain, humidity, altitude, sand/ dust, rail transport, -65°F cold storage, salt spray, fungus, 15° incline		
Protective Devices	Trip circuit breaker for overload/short circuit. Automatic shutdown for low oil pressure.		
Fuel consumption	0.33 gal/hour @ rated load	0.33 gal/hour @ rated load	
Human Factors	MIL-STD-1474: 4 soldier portable: operable in chemical/arctic clothing.		
Noise	79 dBA @ 7 meters (23 feet)		
Reliability (MTBF)	818 hr	490 hr	
Maintenance Ratio	0.033 – organization	0.008 – direct support	
Electrical Characteristic			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brush type 2 pole alternator, solderless connectors, AC alternator: Mechron Power, DC Alternator: Balmar.		
EMI	Not protected		
EMP	Not protected		
Motor load	Not rated		
Voltage Connection	120 V, 1 phase, 2 wire	28 VDC, 2 wire	
Voltage adj. Range	114 - 126 V	26.6 - 32.0 V	
Freq. adj. Range	±5.5%	N/A	
Electrical Performance			
Electric Power Quality	Frequency	AC Voltage	DC Voltage
Regulation	5.6%	4%	4%
Voltage modulation		2%	
Short term steady state stability (30 sec)	3% bandwidth	2% bandwidth	2% bandwidth
Long term steady state stability (4 hr)	3% bandwidth	4% bandwidth	2% bandwidth
Application of rated load	transient	8% undershoot,	30% dip,
	recovery time	4 sec	3 sec
Rejection of rated load	transient	10% overshoot,	40% rise,
	recovery time	5 sec	3 sec
Max waveform deviation factor		16%	
Individual waveform harmonic		15%	
DC ripple			7%

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TABLE A-I Characteristic Data for MEP-531A and MEP-501A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Auxiliary Fuel System	See TM 9-6115-673-13&P		
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-673-13&P	TO 35C2-3-512-1	None	None



MEP-501A, 28 VDC



MEP-531A, 120 V, 60 Hz
has an additional meter (frequency) and a convenience receptacle

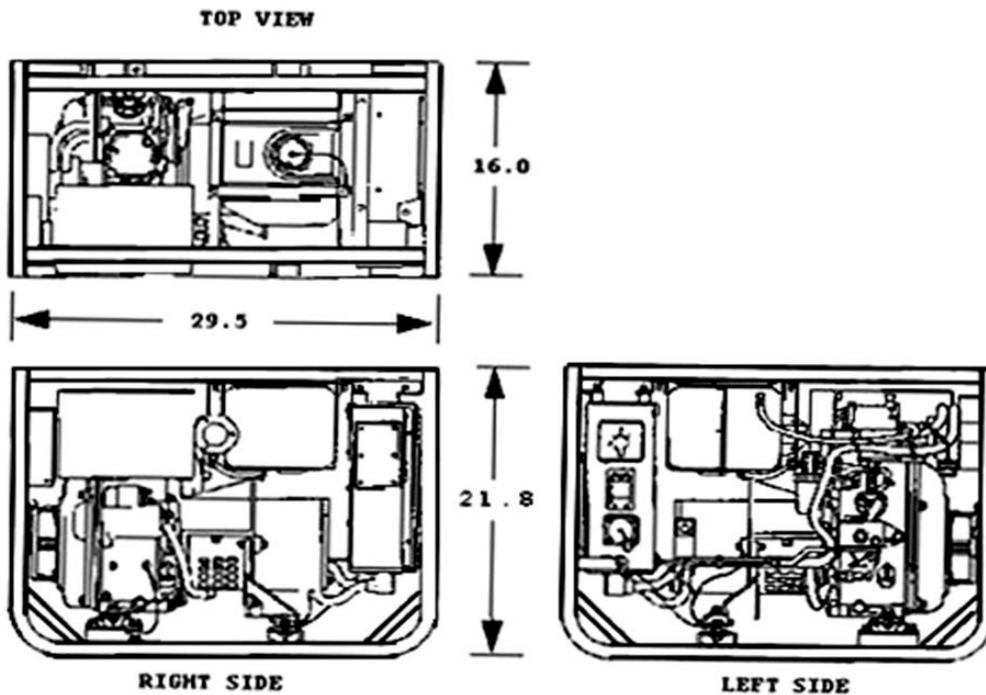


FIGURE A-1 Military Tactical Generator Set, 2 kW

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A.3.1.2 Tactical Quiet Generator Set, DED, 3 kW.

TABLE A-II Characteristic Data for MEP-831A and MEP-832A

Identification Data		
Model	MEP-831A	MEP-832A
Description	3 kW TQG Set, 60 Hz, DED, Skid Mtd	3 kW TQG, 400 Hz, DED, Skid Mtd
NSN	6115-01-285-3012	6115-01-287-2431
LIN	G18358	G74847
SSN	M59400	M59400
Specification		
Trailer Configuration	PP-AN/MJQ-42: FIGURE A-3 PP-AN/MJQ-43A: FIGURE A-4	None
Physical Characteristic		
Dimensions LWH (in)	35 x 28 x 27	
Ship Cube (ft ³)	15	
Wet Weight (lbs)	326 (full tank + battery), 272 (1 hr fuel, no battery)	
Engine	Yanmar L70AE-D/DE Diesel, 1 cylinder/4 stroke, 6.7 hp @ 3600 RPM (variable speed), rope and 24 VDC start, air-cooled.	
Instrumentation	Emergency stop, Fuel level, Hour meter, Voltmeter, Load meter, Battle short, AC interrupt, Fault indicators	
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8	
Fuel Tank Capacity (Gal)	4	
Performance Characteristic		
Power Rating	3 kW, 0.8 pf @ 1000 ft/107°F.	
Environmental Capability	-25°F to 120°F, rain, humidity, altitude, sand/dust, transportation, 9 inch drop, vibration, cold storage, salt spray, fungus, 15° incline.	
Protective Devices	Engine High Temp, Low Oil Pressure, No Fuel, Overvoltage, Overload, Short Circuit	
Fuel consumption	0.33 gal/hour @ rated load	
Human Factors	MIL-STD-1474; 6 soldier portable.	
Noise	72 dBA @ 7 m (23 feet)	
Reliability (MTBF)	500 hr @ 80% Lower Confidence Level (LCL)	
Maintenance Ratio	less than 0.05	
Electrical Characteristic		
Basic Design	Fermont Permanent Magnet Variable Speed Generator, Technology Research Corp (TRC) Solid State Inverter (60Hz and 400Hz).	
EMI	Meets MIL-STD-461C, Part 9 UM04	
EMP	HAEMP IAW MIL-STD-2169	
Motor load	Not rated	
Voltage Connection	120/240 V, 1ph, 3 wire	120 V, 1ph, 2 wire
Voltage adj. Range	228 – 252 V	114 – 126 V
Freq. adj. Range	± 3%	± 3%
Electrical Performance		
Electric Power Quality	Frequency	AC Voltage
Regulation	3%	4%
Voltage modulation		2.5%
Short term steady state stability (30 sec)	4% bandwidth	2% bandwidth
Long term steady state stability (4 hr)	4% bandwidth	4% bandwidth
Application of rated load	transient	4% under
	recovery time	4 sec
Rejection of rated load	transient	5 % over
	recovery time	6 sec
Max waveform deviation factor		7%
Individual waveform harmonic		4%

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TABLE A-II Characteristic Data for MEP-831A and MEP-832A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
None			
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-639-13&P	TO 35C2-3-386-51W/IPB	TM 10155A-OI/1	
TM 9-6115-639-13&P	TO 35C2-3-386-51W/IPB	TM 10155A-OI/1	
TM9-2815-257-24	TO 38G1-128-2	TM 10155A/2815-24/3	
TM9-2815-257-24P	TO 38G1-128-4	TM 10155A/2815-24P/4	



MEP-831A (60 Hz) has convenience outlet and fault protection
Radii: Access door = 25.4", Output Terminal door = 10.0", Control Panel door = 8.5".

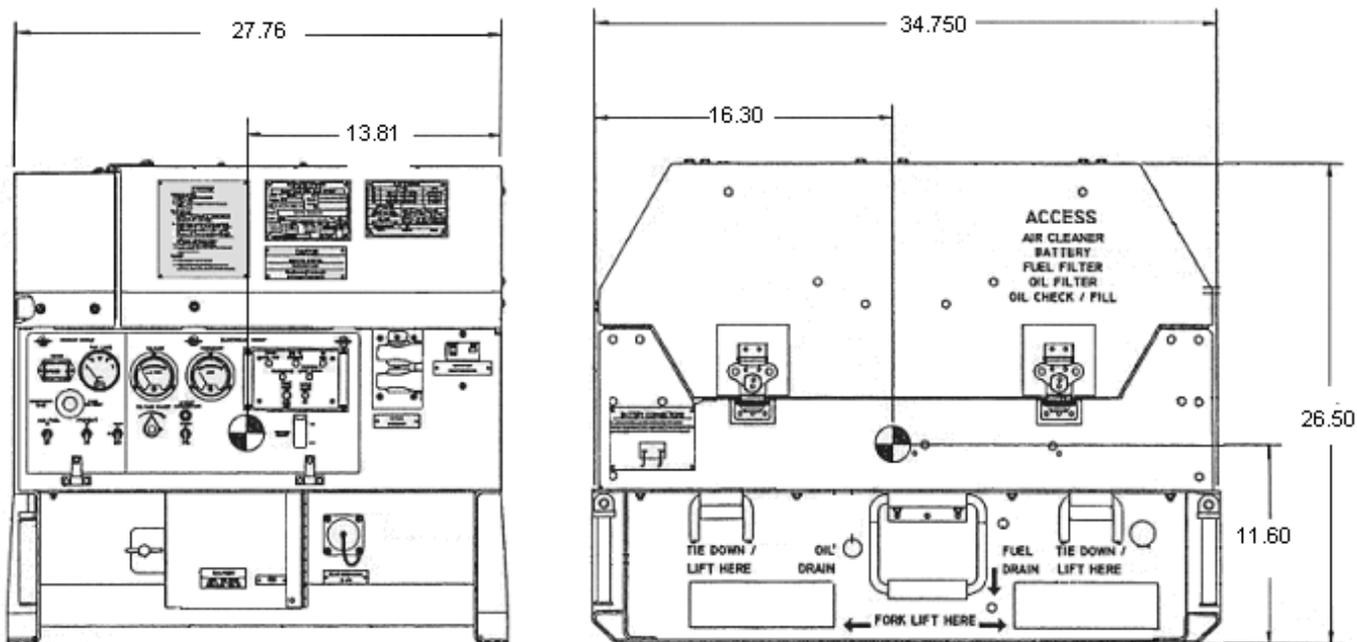
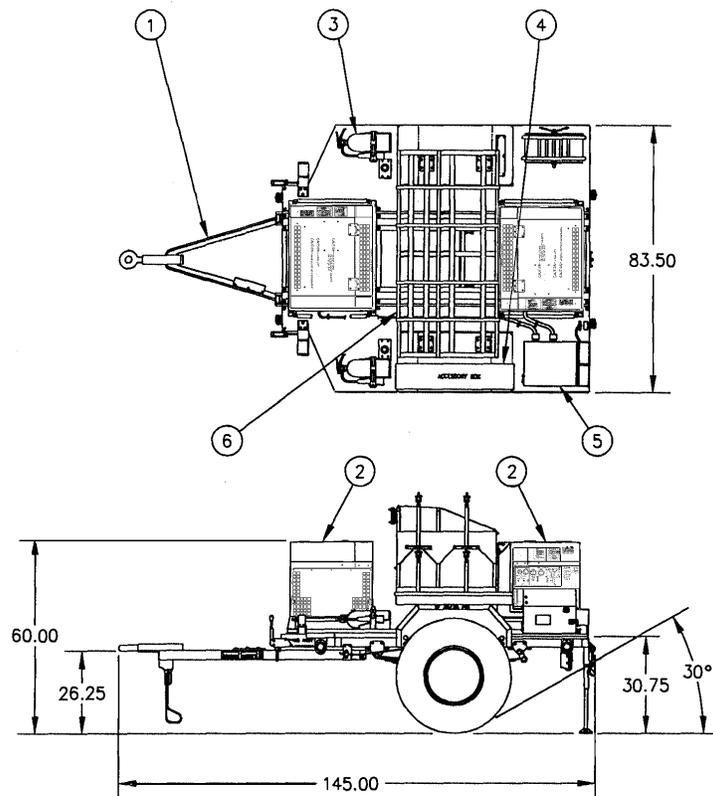


FIGURE A-2 Tactical Quiet Generator Set, 3 kW

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-42	6115-01-322-8583	P42466	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
145 x 84 x 76	535.69	2900	2412
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-658-13&P	MIL-P-53132/2	97403-13226E7477	TA-13229E5720

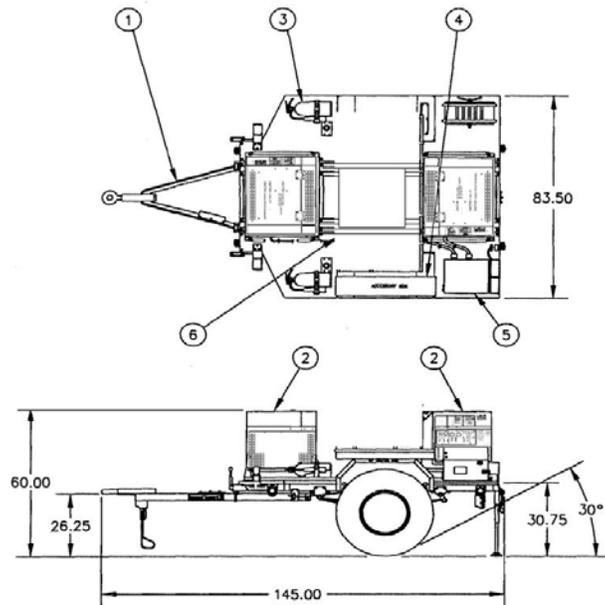


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT)	1	97403-13230E6565
2	MEP-831A	2	6115-01-285-3012
3	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
4	Accessory box	1	97403-13229E7946
5	Switch box	1	97403-13230E6950
6	Rack Assembly (includes cable reel)	1	

FIGURE A-3 PP-AN/MJQ-42 - TQG Power Plant, 3 kW, 60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-43A	6115-01-322-8582	P42534	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 60	403	2212	2187
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-658-13&P	MIL-P-53132/1	97403-13226E7477	TA-13229E5730



FIND NO.	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT)	1	97403-13230E6565
2	MEP-831A	2	6115-01-285-3012
3	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
4	Accessory box	1	97403-13229E7946
5	Switch box	1	97403-13230E6950

FIGURE A-4 PP-AN/MJQ-43A - TQG Power Plant, 3 kW, 60 Hz

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A.3.1.3 Tactical Quiet Generator Set, DED, 5 kW.

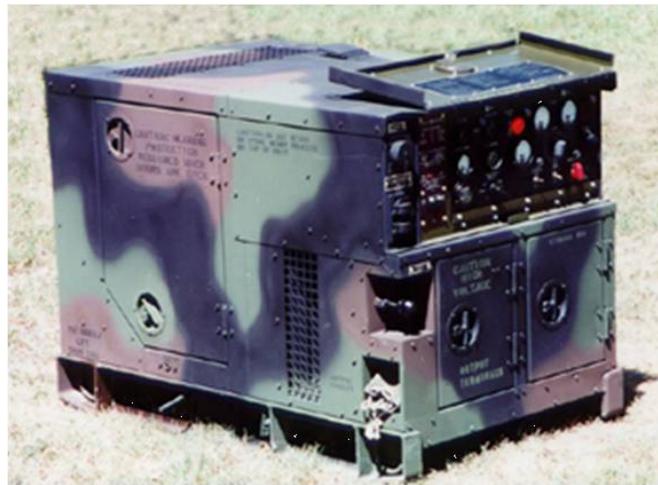
TABLE A-III Characteristic Data for MEP-802A and MEP-812A

Identification Data			
Model	MEP-802A		MEP-812A
Description	5 kW TQG, 60 Hz, DED, Skid Mtd		5 kW TQG, DED, 400Hz, Skid Mtd
NSN	6115-01-274-7387		6115-01-274-7391
LIN	G11966		G12102
SSN	M53500		M53500
Specification	MIL-DTL-53133/1		MIL-DTL-53133/2
Trailer Configuration	PU- 797A: FIGURE A-6 ; AN/MJQ- 35A: FIGURE A-7 ; AN/MJQ-36: FIGURE A-8		None
Physical Characteristic			
Dimensions LWH (in)	51 x 32 x 37		
Ship Cube (ft ³)	35		
Wet Weight (lbs)	888	911	
Engine	Onan DN2M Diesel, 2 cylinder/4 stroke, 11.0hp @1800 RPM, 24VDC start, liquid-cooled.		
Instrumentation	Hour meter, voltmeter, frequency, amps (% rated load), oil pressure, fuel, coolant temperature, battery amps, emergency stop, battle short.		
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8		
Fuel Tank Capacity (Gal)	5		
Performance Characteristic			
Power Rating	5kW, 0.8 pf @ 4000ft/120°F; Derate: 3.5%/1000 ft from 4000 to 8000 ft		
Environmental Capability	-25°F (-50°F with Winterization Kit) to 120°F, rain, humidity, altitude, sand/dust, transportation, cold storage: -60°F, salt spray, fungus, 15° incline.		
Protective Devices	Automatic shut down for overspeed and short circuit. Automatic shut down with emergency bypass for low oil pressure, high temperature, low fuel, and over-voltage. Drop load for under voltage, over current, and reverse power.		
Fuel consumption	0.57 gal/hour @ rated load	0.56 gal/hour @ rated load	
Human Factors	MIL-STD-1474		
Noise	70 dBA @ 7 meters (23 feet)		
Reliability (MTBF)	486 hr @ 80% LCL	479 hr @ 80% LCL	
Maintenance Ratio	less than 0.05		
Electrical Characteristic			
Basic Design	Drip-proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary exciter, solderless connectors, 60Hz: Onan alternator, 4 pole; 400Hz: Onan alternator, 24 pole. Convenience receptacle on 60Hz set.		
EMI	Meets MIL-STD-461C, Part 9 UM04		
EMP	HAEMP IAW MIL-STD-2169		
Motor load	35% dip, 5 sec to 95% init volt		
Voltage Connection	120/240V, 1ph, 3 wire	120V, 1ph, 2 wire	120/208V, 3ph, 4 wire
Voltage adj. Range	228 –252 V	114 – 126 V	205 –220 V
Freq. adj. Range	±3%		
Electrical Performance			
Electric Power Quality		Frequency	AC Voltage
Regulation		3%	3%
Voltage modulation			2.5%
Short term steady state stability (30 sec)		2% bandwidth	2% bandwidth
Long term steady state stability (4 hr)		3% bandwidth	4% bandwidth
Application of rated load	transient	3% under	20 % dip
	recovery time	3 sec	3 sec
Rejection of rated load	transient	4% over	20% rise
	recovery time	3 sec	3 sec
Max waveform deviation factor			6% (1 phase); 5% (3 phase)
Individual waveform harmonic			3% (1 phase); 2% (3 phase)

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TABLE A-III Characteristic Data for MEP-802A and MEP-812A Continued.

Optional Equipment			
Description	NSN	Technical Bulletin	Effect on Dimensions (in)
Winterization kit	6115-01-476-8973	TB 9-6115-641-13	None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-641-10	TO 35C2-3-456-11	None	
TM 9-6115-641-24	TO 35C2-3-456-12		
TM 9-6115-641-24P	TO 35C2-3-456-14		
TM 9-2815-252-24	TO 38G1-92-2		
TM 9-2815-252-24P	TO 38G1-92-4		
LO 9-6115-641-12			
TB 9-6115-641-24			



MEP-802A or MEP-812A

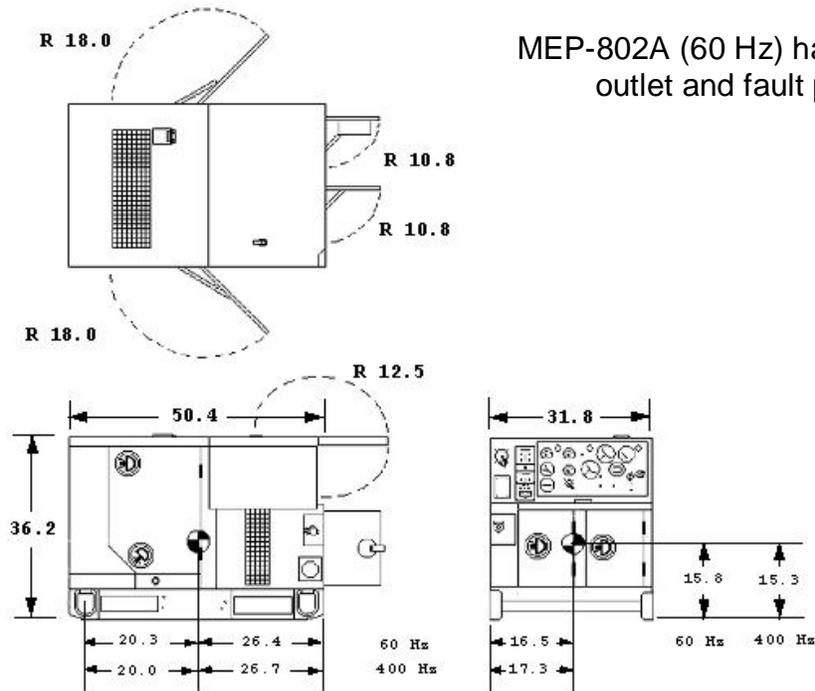
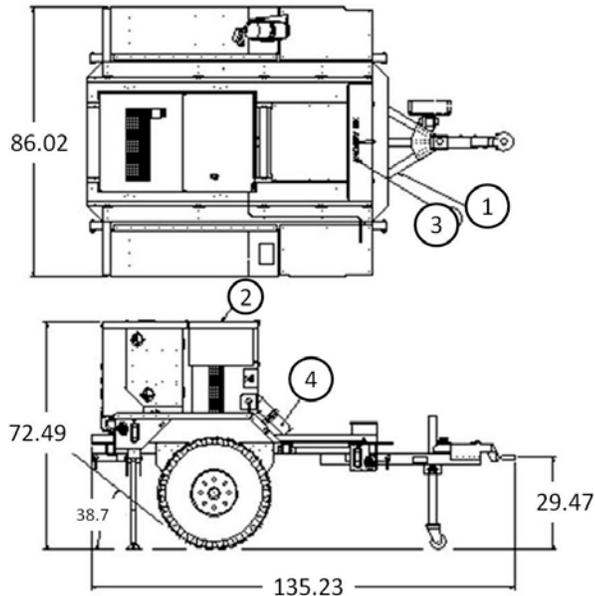


FIGURE A-5 Tactical Quiet Generator Set, 5 kW

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Identification Data			
Model	NSN	LIN	SSN
PU-797A	6115-01-413-3820	G42238	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 72	484	2320	2360
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-659-13&P		97403-13228E1608	TA-13230E6520

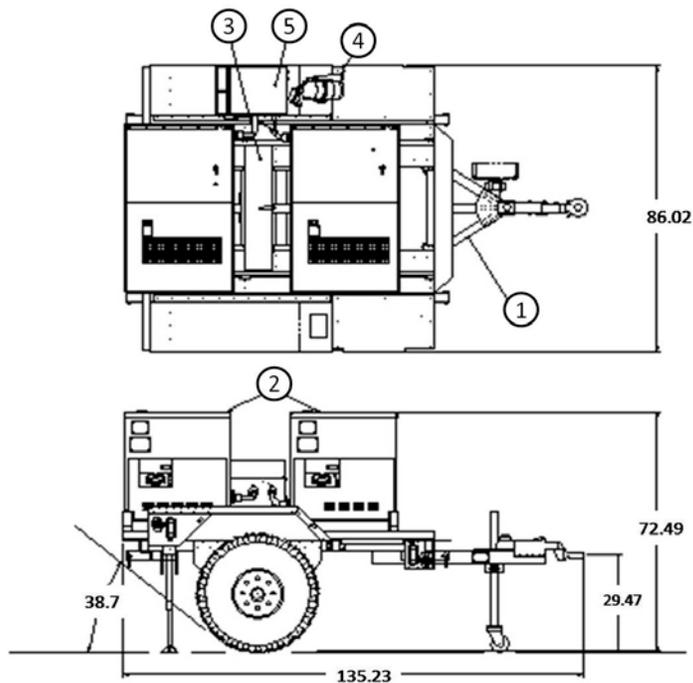


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT)	1	97403-13230E6565
2	MEP-802A	1	6115-01-274-7387
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-6 PU-797A - TQG Power Unit, 5 kW, 60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-35A	6115-01-414-9697	P28083	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 72	484	3223	3140
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-659-13&P		97403-13228E1609	TA-13230E6560

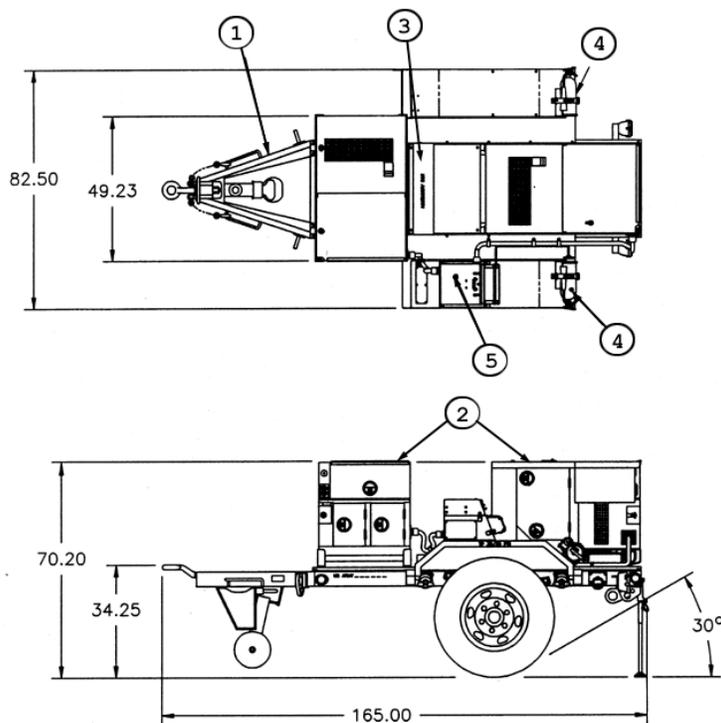


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT)	1	97403-13230E6565
2	MEP-802A	2	6115-01-274-7387
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512
5	Switch box	1	97403-13230E6535

FIGURE A-7 PP-AN/MJQ-35A - TQG Power Plant, 5 kW, 60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-36	6115-01-313-4215	P28151	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 83 x 71	563	3785	3985
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-659-13&P	MIL-P-53132/4	97403-13228E1610	TA-13229E5660



FIND NO.	COMPONENT	QTY	IDENTIFIER
1	1-1/2 Ton modified trailer, M103A3	1	97403-13229E5825
2	MEP-802A	2	6115-01-274-7387
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box	1	97403-13230E6535

FIGURE A-8 PP-AN/MJQ-36 - TQG Power Plant, 5 kW 60 Hz

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A.3.1.4 Tactical Quiet Generator Set, DED, 10 kW

TABLE A-IV Characteristic Data for MEP-803A and MEP-813A

Identification Data			
Model	MEP-803A		MEP-813A
Description	10 kW TQG, 60 Hz, DED, Skid Mounted		10 kW TQG, 400 Hz, DED, Skid Mounted
NSN	6115-01-275-5061		6115-01-274-7392
LIN	G74711		G74779
SSN	M53500		M53500
Specification	MIL-DTL-53133/3		MIL-DTL-53133/4
Trailer Configuration	PU-798A: FIGURE A-10 PP-AN/MJQ-37: FIGURE A-12		PU-799A: FIGURE A-11 PP-AN/MJQ-38: FIGURE A-13
Physical Characteristic			
Dimensions LWH (in)	62 x 32 x 37		
Ship Cube (ft ³)	42		
Wet Weight (lbs)	1182	1220	
Engine	Diesel, Onan model: DN4M-1, 4 cycle, 22 horsepower @ 1800 RPM, 24 VDC start, Liquid cooled.		
Instrumentation	Hour meter, voltmeter, frequency, amps (% rated load), oil pressure, fuel, coolant temperature, battery amps, emergency stop, battle short.		
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8		
Fuel Tank Capacity (Gal)	9		
Performance Characteristic			
Power Rating	10kW, 0.8 pf @ 4000 ft/120°F; Derate: 3.5%/1000 ft from 4000 to 8000 ft		
Environmental Capability	-25°F (-50°F with Winterization Kit) to 120°F, rain, humidity, altitude, sand/dust, transportation, cold storage: -60°F, salt spray, fungus, 15° incline.		
Protective Devices	Automatic shut down for overspeed and short circuit. Automatic shut down with emergency bypass for low oil pressure, high temperature, low fuel, and over-voltage. Drop load for under voltage, over current, and reverse power.		
Fuel consumption	0.97 gal/hour @ rated load	1.00 gal/hour @ rated load	
Human Factors	MIL-STD-1474		
Noise	70 dBA @ 7 meters (23 feet)		
Reliability (MTBF)	771 hr @ 80% LCL	527 hr @ 80% LCL	
Maintenance Ratio	less than 0.05		
Electrical Characteristic			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Onan synchronous rotating field generator: 60 Hz: 4 pole alternator, 400 Hz: 24 pole.		
EMI	Meets MIL-STD-461C, Part 9 UM04		
EMP	HAEMP IAW MIL-STD-2169		
Motor load	35% dip, 5 sec to 95% init volt		
Voltage Connection	120/240 V, 1ph, 3 wire	120 V, 1ph, 2 wire	120/208 V, 3ph, 4 wire
Voltage adj. Range	228 -252 V	114 - 126 V	205 -220 V
Freq. adj. Range	±3%		
Electrical Performance			
Electric Power Quality		Frequency	AC Voltage
Regulation		3%	3%
Voltage modulation			1%
Short term steady state stability (30 sec)		2% bandwidth	2% bandwidth
Long term steady state stability (4 hr)		3% bandwidth	4% bandwidth
Application of rated load	transient	3% under	20% dip
	recovery time	3 sec	3 sec
Rejection of rated load	transient	4% over	20% rise
	recovery time	3 sec	3 sec
Max waveform deviation factor			6% (1 phase); 5%(3 phase)
Individual waveform harmonic			3% (1 phase); 2% (3 phase)

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TABLE A-IV Characteristic Data for MEP-803A and MEP-813A Continued.

Optional Equipment			
Description	NSN	Technical Bulletin	Effect on Dimensions (in)
Winterization kit	6115-01-477-0564	TB 9-6115-642-13	None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-642-10	TO 35C2-3-455-11	TM 09247A/09248A-10/1	
TM 9-6115-642-24	TO 35C2-3-455-12	TM 09247A/09248A-24/2	
TM 9-6115-642-24P	TO 35C2-3-455-14	TM 09247A/09248A-24P/3	
LO 9-6115-642-12		LI 09247A/09248A-12	
TB 9-6115-642-24		SI 09247A/09248A-24	
TM 9-2815-253-24	TO 38G1-93-2	TM 2815-24/3	
TM 9-2815-253-24P	TO 38G1-93-4	TM 2815-24P/1	



MEP-803A or MEP-813A

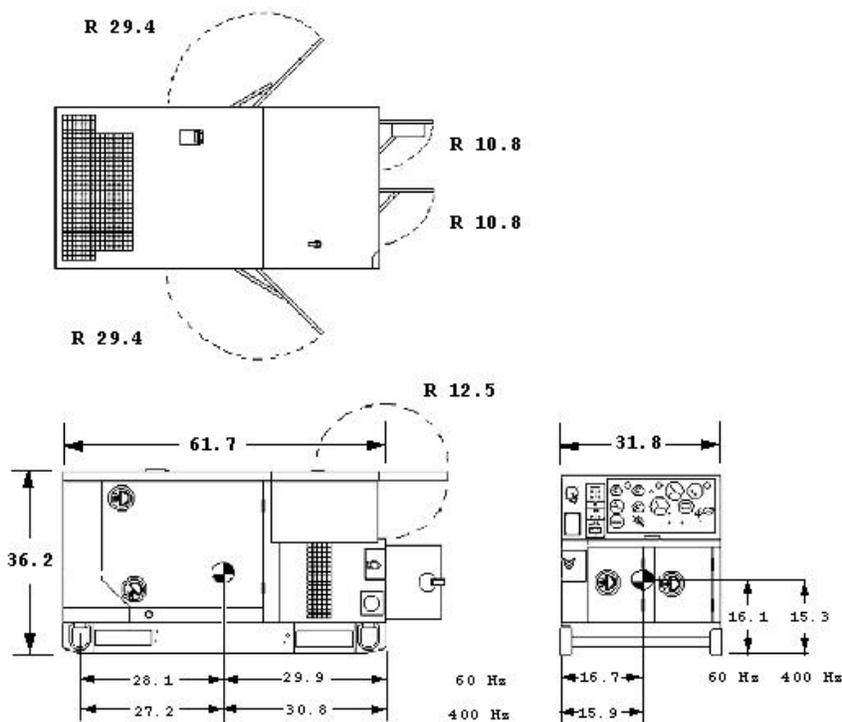
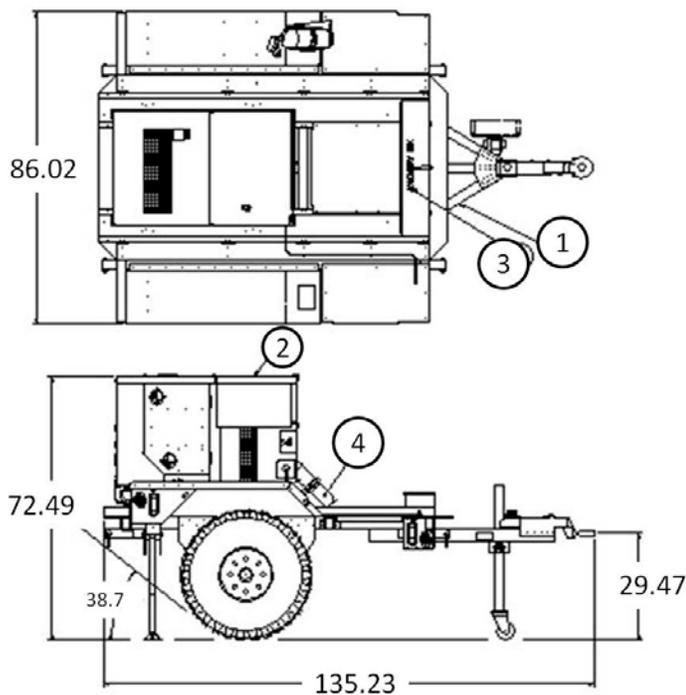


FIGURE A-9 Tactical Quiet Generator Set, 10 kW

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Identification Data			
Model	NSN	LIN	SSN
PU-798A	6115-01-413-3818	G42170	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 72	484	2554	2480
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-660-13&P		97403-13228E1611	TA-13230E6530

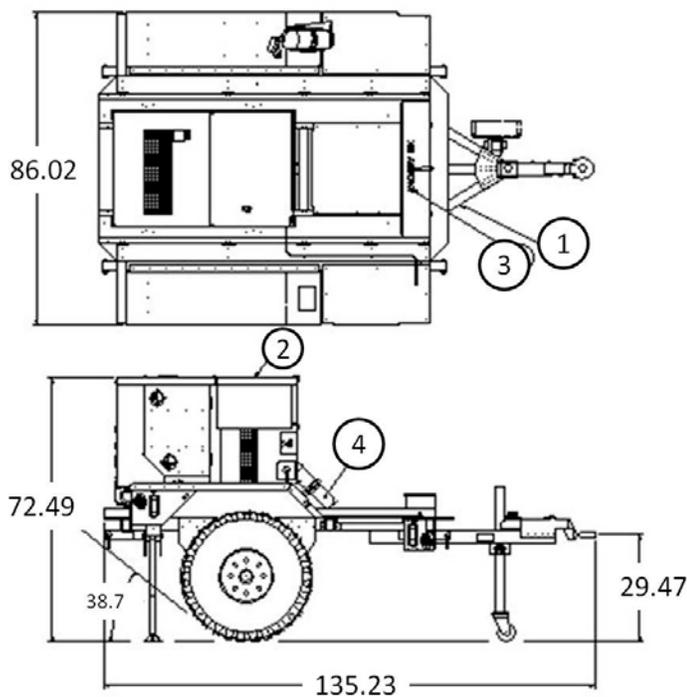


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT)	1	97403-13230E6565
2	MEP-803A	1	6115-01-275-5061
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-10 PU-798A - TQG Power Unit, 10 kW, 60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PU-799A	6115-01-413-3819	G53403	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 72	484	2585.	2510
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-660-13&P		97403-13228E1611	TA-13230E6540

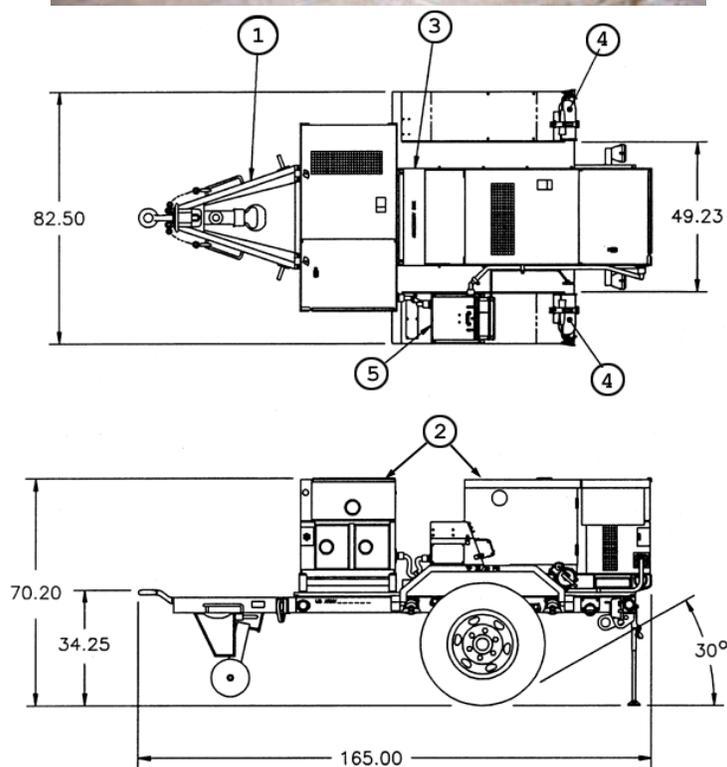


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT)	1	7403-13230E6565
2	MEP-813A	1	6115-01-274-7392
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-11 PU-799A - TQG Power Unit, 10 kW, 400 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-37	6115-01-299-6035	P42262	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 83 x 71	563	4334	4540
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-660-13&P	MIL-P-53132/6	97403-13228E1612	TA-13229E5670

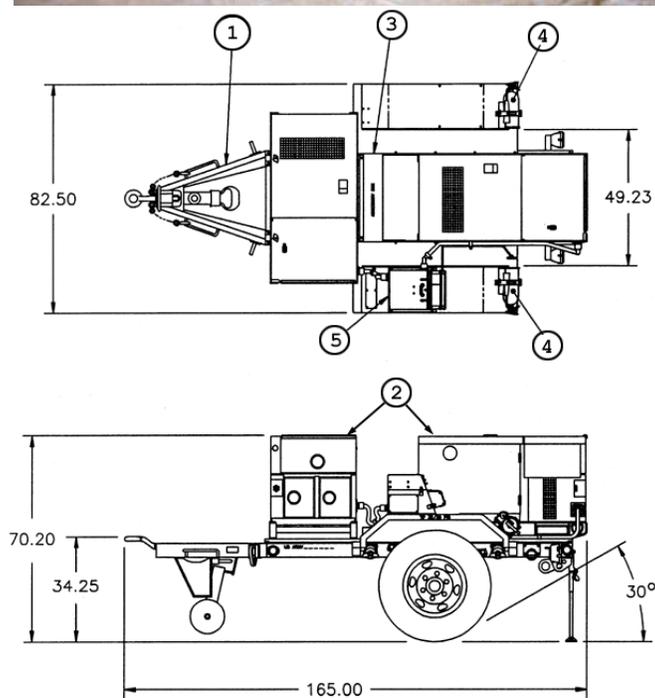


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	1-1/2 Ton modified trailer,M103A3	1	97403-13229E5825
2	MEP-803A	2	6115-01-275-5061
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box	1	97403-13230E6535

FIGURE A-12 PP-AN/MJQ-37 - TQG Power Plant, 10 kW, 60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-38	6115-01-313-4214	P42330	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 83 x 71	563	4500	4350
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-660-13&P	MIL-P-53132/7	97403-13228E1612	TA-13229E5680



FIND NO.	COMPONENT	QTY	IDENTIFIER
1	1-1/2 Ton modified trailer, M103A3	1	97403-13229E5825
2	MEP-813A	2	6115-01-274-7392
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512
5	Switch box	1	97403-13230E6535

FIGURE A-13 PP-AN/MJQ-38 - TQG Power Plant, 10 kW, 400 Hz

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A.3.1.5 Tactical Quiet Generator Set, DED, 15 kW

TABLE A-V Characteristic Data for MEP-804B and MEP-814B

Identification Data						
Model	MEP-804B			MEP-814B		
Description	15 kW TQG, 50/60 Hz, DED, Skid Mtd			15 kW, TQG, 400 Hz, DED, Skid Mtd		
NSN	6115-01-530-1458			6115-01-529-9494		
LIN	G12170			G12238		
SSN	M53500			M53500		
Specification	MIL-DTL-53133/5			MIL-DTL-53133/6		
Trailer Configuration	PU-801B: FIGURE A-16 ; PU-802A: FIGURE A-17 PP-AN/MJQ-48B: FIGURE A-19			PU-800A: FIGURE A-15 PP-AN/MJQ-39B: FIGURE A-18		
Physical Characteristic						
Dimensions LWH (in)	70 x 36 x 55					
Ship Cube (ft ³)	80					
Wet Weight (lbs)	2124			2238		
Engine	Yanmar - Model: 4TNV84T-DFM 4 Cycle, Liquid Cooled, 4 Cyl, 3.31 Inch Bore, 40 BHP @ 1800 RPM, 24 VDC starter.					
Instrumentation	Hour meter, voltmeter, frequency, amps (% rated load), oil pressure, fuel, coolant temperature, battery amps, emergency stop, battle short.					
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8.					
Fuel Tank Capacity (Gal)	14					
Performance Characteristic						
Power Rating	15 kW (12.5 kW @ 50 Hz), 0.8 pf @ 4000 ft/120 °F; Derate: 3.5%/1000 ft from 4000 to 8000 ft					
Environmental Capability	-25°F (-50°F W/kit) to 120°F, rain, humidity, altitude, sand/dust, transportation, cold storage: -60°F, salt spray, fungus, 15° incline.					
Protective Devices	Automatic shut down for overspeed and short circuit. Automatic shut down with emergency bypass for low oil pressure, high temperature, low fuel, and over-voltage. Drop load for under voltage, over current, and reverse power.					
Fuel consumption	1.44 gal/hour @ rated load			1.75 gal/hour @ rated load		
Human Factors	MIL-STD-1474					
Noise	70 dBA @ 7 meters (23 feet)					
Reliability (MTBF)	594 hr @ 80% LCL			377 hr @ 80% LCL		
Maintenance Ratio	less than 0.05					
Electrical Characteristic						
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, brushless Marathon/Lima generator.					
EMI	Meets MIL-STD-461C, Part 9 UM04					
EMP	HAEMP IAW MIL-STD-2169					
Motor load	30% dip, .7 sec to 95% init volt			25% dip,.7 sec to 95% init volt		
Voltage Connection	120/208V, 3ph, 4 wire			240/416V, 3ph, 4 wire		
Frequency	50 Hz	60 Hz	400 Hz	50 Hz	60 Hz	400 Hz
Voltage adj. Range	190 – 213 V	197 – 240 V	197 – 240 V	380 – 426 V	395 – 480 V	395 – 458 V
Freq. adj. Range	48 – 52 Hz	58 – 62 Hz	390 – 420 Hz	48 – 52 Hz	58 – 62 Hz	390 – 420 Hz
Electrical Performance						
Electric Power Quality	MEP-804B			MEP-814B		
	Frequency	AC Voltage		Frequency	AC Voltage	
Regulation	0.25%	1%		0.25%	1%	
Voltage modulation		1%			1%	
Short term steady state stability (30 sec)	0.5% bandwidth	1% bandwidth		0.5% bandwidth	1% bandwidth	
Long term steady state stability (4 hr)	1% bandwidth	2% bandwidth		1% bandwidth	2% bandwidth	
Application of rated load	transient	4% under	15% dip	1.5 % under	12% dip	
	recovery time	2 sec	0.5sec	1 sec	0.5 sec	
Rejection of rated load	transient	4% over	15% rise	1.5% over	12% rise	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Max waveform deviation factor		5%			5%	
Individual waveform harmonic		2%			2%	

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TABLE A-V Characteristic Data for MEP-804B and MEP-814B Continued.

Optional Equipment			
Description	NSN	Technical Bulletin	Effect on Dimensions (in)
Winterization kit	6115-01-477-0566	TB 9-6115-643-13	None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-643-10	TO 35C2-3-455-21	None	None
TM 9-6115-643-24	TO 35C2-3-455-22		
TM 9-6115-643-24P	TO 35C2-3-455-24		
TM 9-2815-254-24	TO 38G1-94-2		
TM 9-2815-254-24P	TO 38G1-94-4		
LO 9-6115-643-12			
TB 9-6115-643-24			



MEP-804A, MEP-804B, MEP-814A or MEP-814B

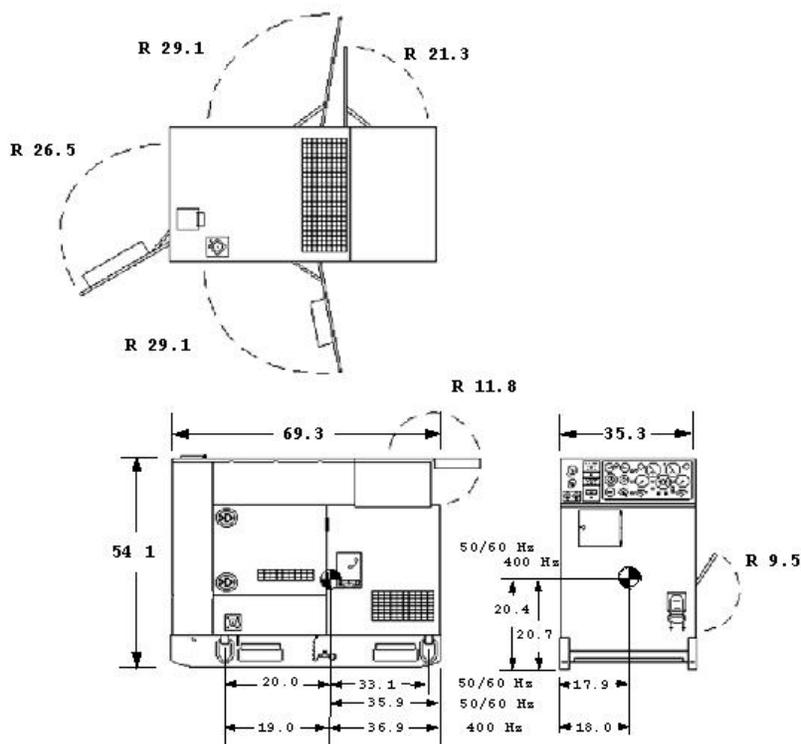
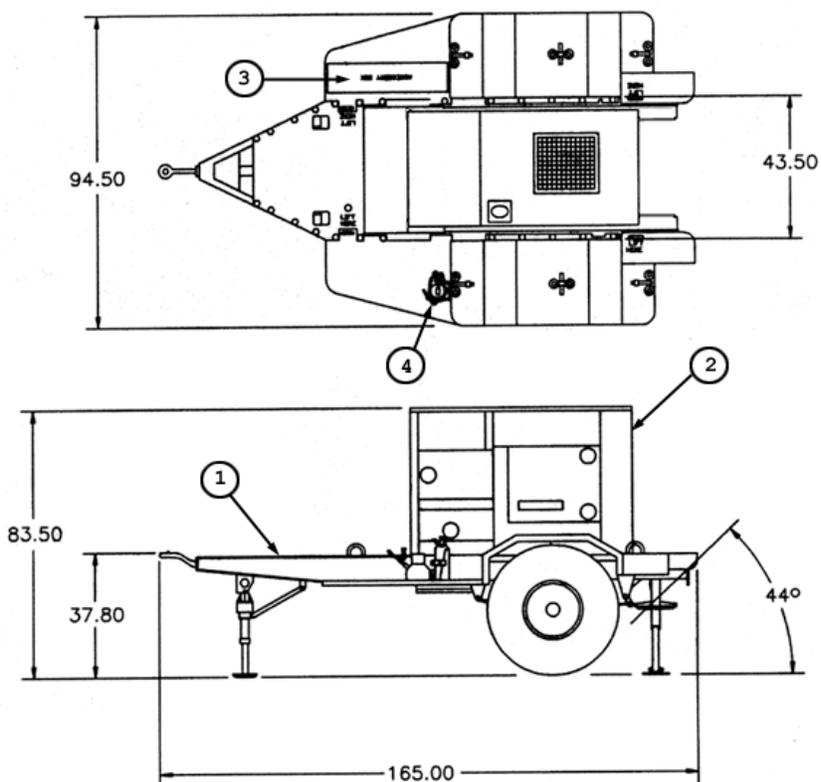


FIGURE A-14 Tactical Quiet Generator Set, 15 kW

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Identification Data			
Model	NSN	LIN	SSN
PU-800A	6115-01-565-0929	G78203	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 84	762	4975	4855
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	MIL-P-53132	97403-13228E1614	TA-97-2111

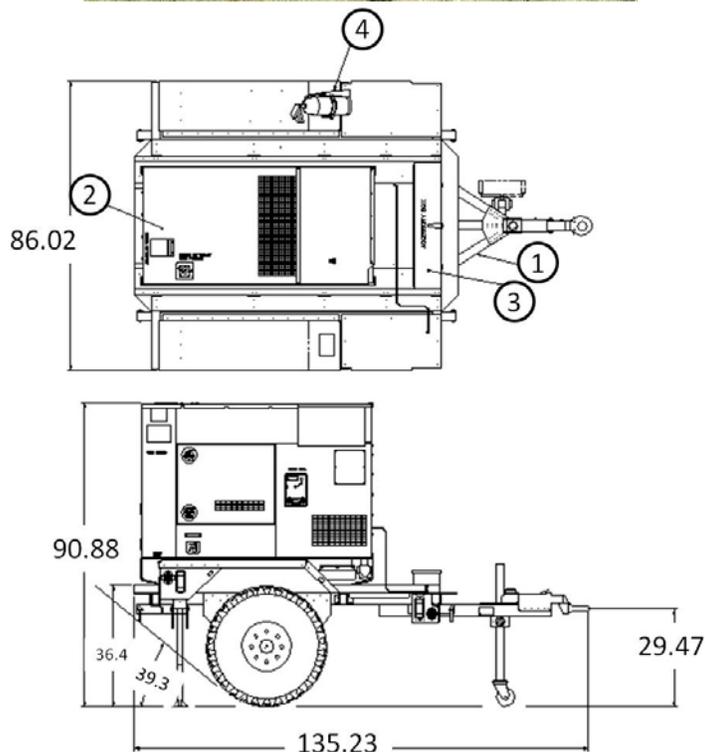


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	2 1/2 Ton modified Trailer, M200A1	1	97403-13229E9623
2	MEP-814B	1	6115-01-274-7393
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-15 PU-800A - TQG Power Unit, 15 kW, 400 Hz

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Identification Data			
Model	NSN	LIN	SSN
PU-801B	6115-01-565-0874	G78374	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 91	611	3516	3400
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	MIL-P-53132/12	97403-13228E1613	TA-97-2003

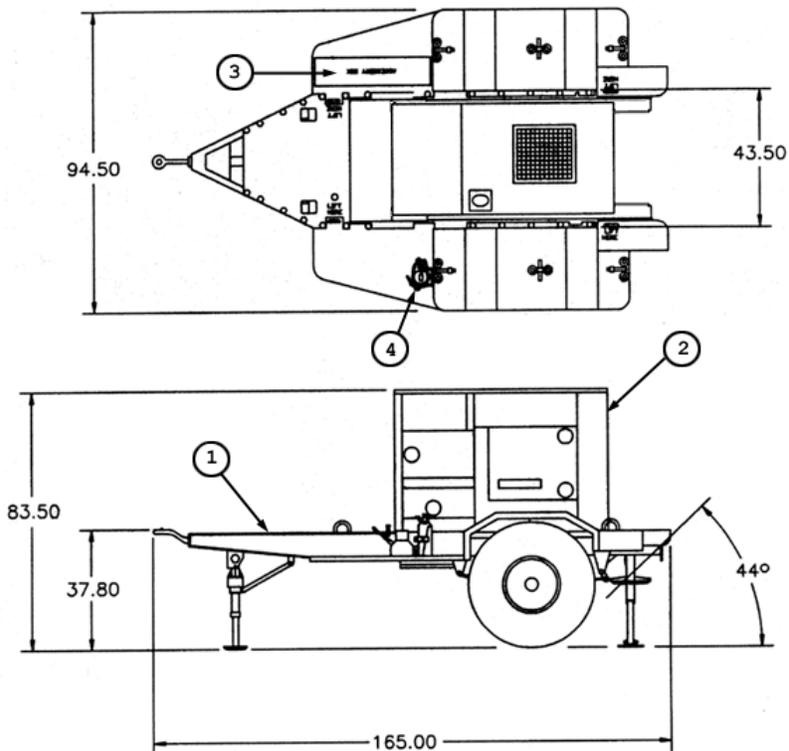


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT)	1	97403-13230E6565
2	MEP-804B	1	6115-01-274-7388
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-16 PU-801B - TQG Power Unit, 15 kW, 50/60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PU-802A	6115-01-565-1576	G53778	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 84	762	5040	4920
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	MIL-P-53132/13	97403-13228E1614	TA-97-2101

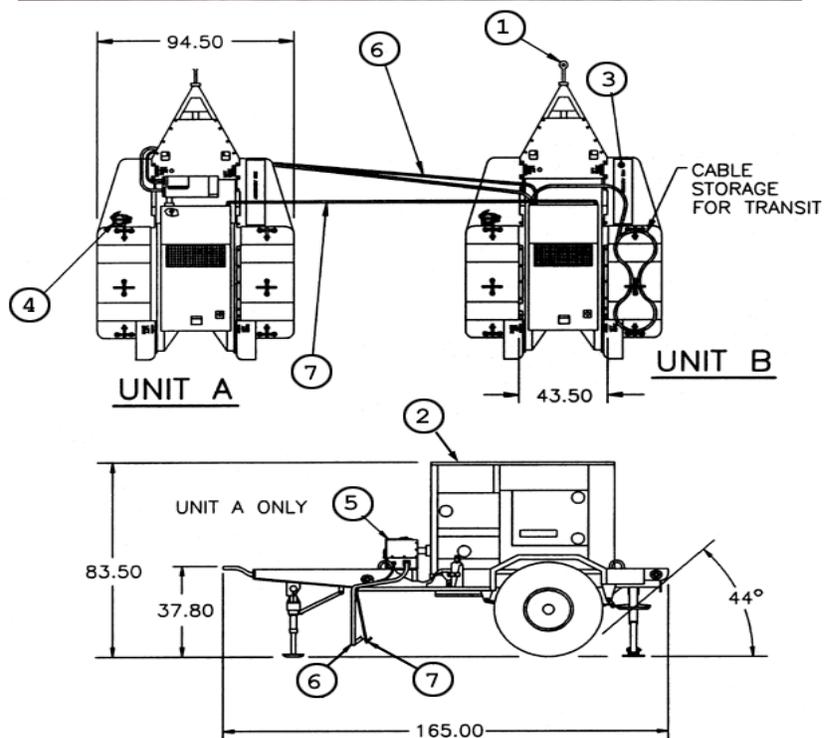


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13229E9632
2	MEP-804B	1	6115-01-274-7388
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-17 PU-802A - TQG Power Unit, 15 kW, 50/60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-ANMJQ-39B	6115-01-565-0701	P42614	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 84 each	762 each	Unit A: 4863 Unit B: 4893	Unit A: 4765 Unit B: 4765
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	MIL-P-53132	97403-13228E1614	TA-97-3104

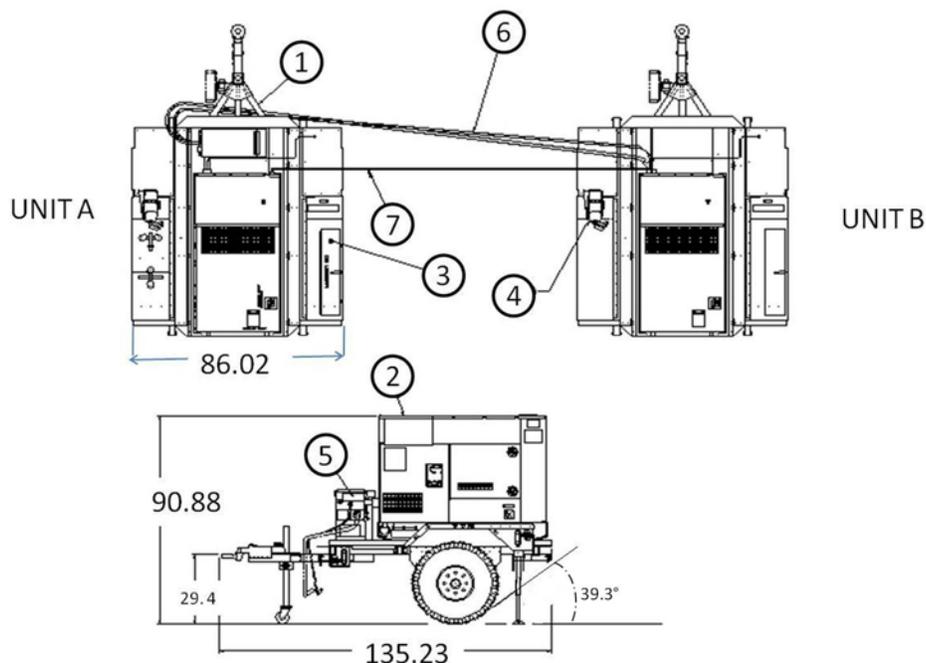


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	2	97403-13229E9632
2	MEP-814B	2	6115-01-529-9494
3	Accessory box	2	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A)	1	97403-13229E5795-1
6	Cable assembly (unit B)	1	97403-13229E5674
7	Paralleling cable assembly	2	30554-88-22209

FIGURE A-18 PP-AN/MJQ-39B - TQG Power Plant, 15 kW, 400 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-48B	6115-01-565-0691	P63530	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 91 each	611 each	Unit A: 3570 Unit B: 3570	Unit A: 3470 Unit B: 3470
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	MIL-P-53132	97403-13228E1728	TA-97-3003



FIND NO.	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT)	2	97403-13230E6565
2	MEP-804A	2	6115-01-274-7388
3	Accessory box	2	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A)	1	97403-13229E5795-1
6	Cable assembly (unit B)	1	97403-13229E5674
7	Paralleling cable assembly	2	30554-88-22209

FIGURE A-19 PP-AN/MJQ-48B - TQG Power Plant, 15 kW, 50/60 Hz

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A.3.1.6 Tactical Quiet Generator Set, DED, 30 kW

TABLE A-VI Characteristic Data for MEP-805B and MEP-815B

Identification Data						
Model	MEP-805B			MEP-815B		
Description	30 kW TQG, 50/60 Hz, DED, Skid Mounted			30 kW TQG, 400 Hz, DED, Skid Mounted		
NSN	6115-01-461-9335			6115-01-462-0290		
LIN	G74575			G74643		
SSN	M53500			M53500		
Specification	MIL-DTL-53133/7			MIL-DTL-53133/8		
Trailer Configuration	PU-803B, FIGURE A-21 PP-AN/MJQ-40B, FIGURE A-23			PU-804B, FIGURE A-22		
Physical Characteristics						
Dimensions LWH (in)	80 x 36 x 55					
Ship Cube (ft ³)	92					
Wet Weight (lbs)	3040			3060		
Engine	John Deere - Model: 4045TF151 4 cyl Turbo Diesel, 92 hp @ 1800 RPM, 24 VDC starter, liquid cooled. EPA certified.					
Instrumentation	Digital Display, Remote Monitoring Capable					
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8.					
Fuel Tank Capacity (Gal)	23					
Performance Characteristics						
Power Rating	30 kW (25 kW @ 50 Hz), 0.8 pf @ 4000 ft/120°F; Derate: 3.5%/1000 ft from 4000 to 8000 ft					
Environmental Capability	-25°F (-50°F W/kit) to 120°F, rain, humidity, altitude, sand/dust, transportation, cold storage: -60°F, salt spray, fungus, 15° incline.					
Protective Devices	Automatic shut down for overspeed and short circuit. Automatic shut down with emergency bypass for low oil pressure, high temperature, low fuel, and over-voltage. Drop load for under voltage, over current, and reverse power.					
Fuel consumption	2.7 gal/hour @ rated load			3.0 gal/hour @ rated load		
Human Factors	MIL-STD-1474					
Noise	70 dBA @ 7 meters (23 feet)					
Reliability (MTBF)	1638 hr @ 80% LCL			679 hr @ 80% LCL		
Maintenance Ratio	less than 0.05					
Electrical Characteristics						
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Marathon(50/60&400) or Marelli(50/60) synch. rotating field generator.					
EMI	Meets MIL-STD-461C, Part 9 UM04					
EMP	HAEMP IAW MIL-STD-2169					
Motor load	30% dip, .7 sec to 95% init volt			30% dip, .7 sec to 95% init volt		
Voltage Connection	120/208V, 3ph, 4 wire			240/416V, 3ph, 4 wire		
Frequency	50 Hz	60 Hz	400 Hz	50 Hz	60 Hz	400 Hz
Voltage adj. Range	190 – 213 V	197 - 240 V	197 - 229 V	380 – 426 V	395 - 480 V	395 - 458 V
Freq. adj. Range	± 2 Hz for 50/60 Hz			390 – 410 Hz for 400 Hz		
Electrical Performance						
Electric Power Quality	MEP-805B			MEP-815B		
	Frequency	AC Voltage		Frequency	AC Voltage	
Regulation	0.25%	1%		0.25%	1%	
Voltage modulation		1%			1%	
Short term steady state stability (30 sec)	0.5% bandwidth	1% bandwidth		0.5% bandwidth	1% bandwidth	
Long term steady state stability (4 hr)	1% bandwidth	2% bandwidth		1% bandwidth	2% bandwidth	
Application of rated load	transient	4% under	15% dip	1.5% under	12% dip	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Rejection of rated load	transient	4% over	15% rise	1.5% over	12% rise	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Max waveform deviation factor		5%			5%	
Individual waveform harmonic		2%			2%	

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TABLE A-VI Characteristic Data for MEP-805B and MEP-815B Continued.

Optional Equipment			
Description	NSN	Technical Bulletin	Effect on Dimensions (in)
Winterization kit	6115-01-474-8354	TB 9-6115-644-13	None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-671-14	TO 35C2-3-446-32	TM 09249A/09246A-14	
TM 9-6115-671-24P	TO 35C2-3-446-34	TM 09249A/09246A-24P/3	
TM 9-2815-259-24	TO 38BG1-125-2	TM 09249A/09246A-24	
TM 9-2815-259-24P	TO 38BG1-125-4	TM 09249A/2815-24P/4	
LO 9-6115-644-12			
TB 9-6115-671-24			



MEP-805B or MEP-815B

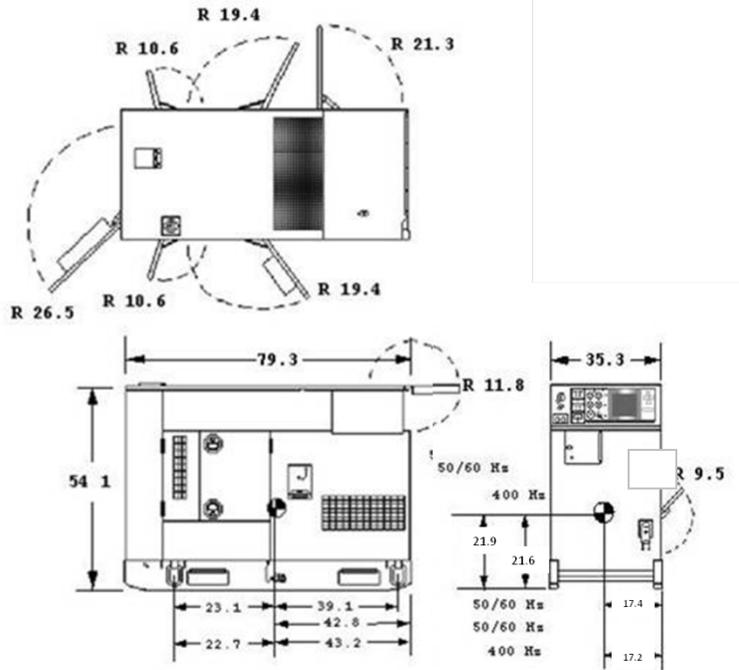
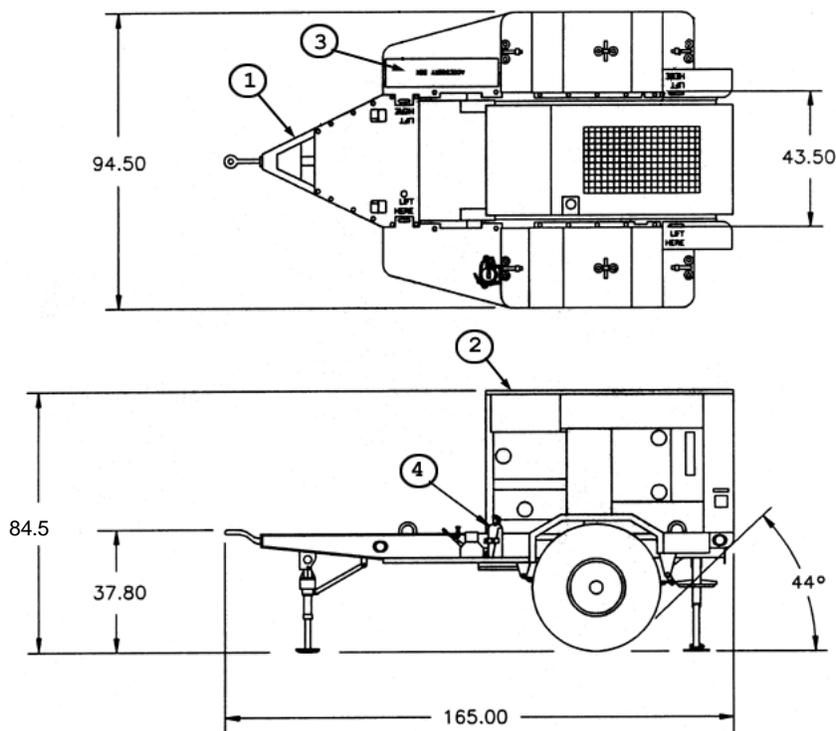


FIGURE A-20 Tactical Quiet Generator Set, 30 kW (re-engine)

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Identification Data			
Model	NSN	LIN	SSN
PU-803B	6115-01-470-6376	G35851	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 85	771	5525	5320
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-662-13&P	MIL-P-53132/15	97403-13228E1615	TA-13230E6849

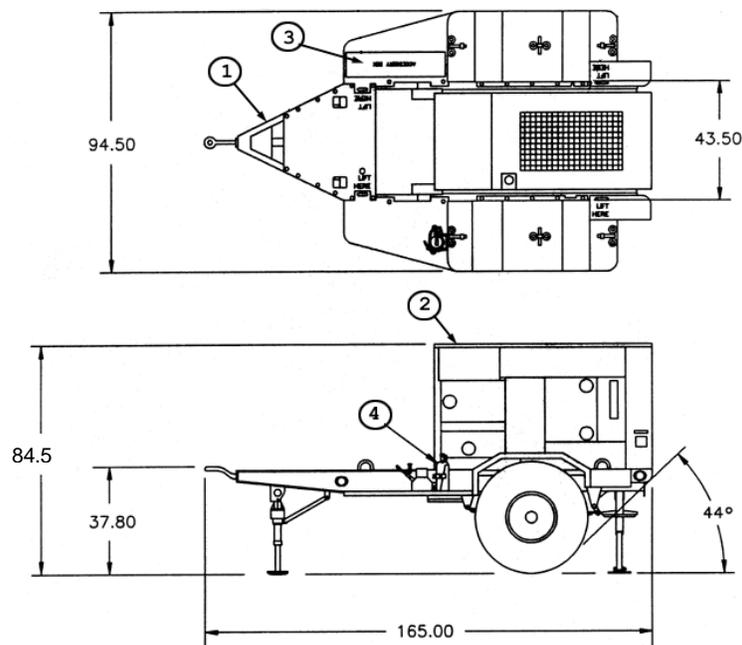


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13229E9632
2	MEP-805B	1	6115-01-461-9335
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-21 PU-803B - TQG Power Unit, 30 kW, 50/60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PU-804B	6115-01-471-1507	G35919	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 85	771	5545	5340
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-662-13&P	MIL-P-53132/16	97403-13228E1615	TA-13230E6850

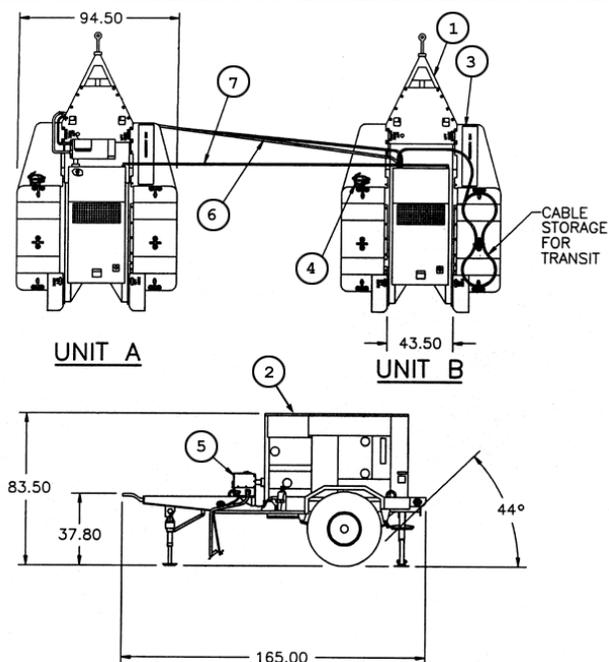


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13229E9632
2	MEP-815B	1	6115-01-462-0290
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-22 PU-804B - TQG Power Unit, 30 kW, 400 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-40B	6115-01-474-3783	P42126	R62700
Physical Characteristic			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 85 each	771 each	Unit A: 5590 Unit B: 5590	Unit A: 5390 Unit B: 5390
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-662-13&P	MIL-P-53132/14	97403-13228E1615	TA-13230E6853



FIND NO.	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	2	97403-13229E9632
2	MEP-805B	2	6115-01-461-9335
3	Accessory box	2	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A)	1	97403-13229E5795-2
6	Cable assembly (unit B)	1	97403-13229E5738
7	Paralleling cable assembly	2	30554-88-22209

FIGURE A-23 PP-AN/MJQ-40B - TQG Power Plant, 30 kW, 50/60 Hz

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A.3.1.7 Tactical Quiet Generator Set, DED, 60 kW

TABLE A-VII Characteristic Data for MEP-806B and MEP-816B

Identification Data						
Model	MEP-806B			MEP-816B		
Description	60 kW TQG, 50/60 Hz, DED, Skid Mtd			60 kW TQG, 400 Hz, DED, Skid Mtd		
NSN	6115-01-462-0291			6115-01-462-0292		
LIN	G12034			G18052		
SSN	M53500			M53500		
Specification	MIL-DTL-53133/9			MIL-DTL-53133/10		
Trailer Configuration	PU-805B, FIGURE A-25 ; PP-AN/MJQ-41B FIGURE A-27 ; PP-AN/MJQ-1612B, FIGURE A-28			PU-806B, FIGURE A-26 PP-AN/MJQ-1632B, FIGURE A-29		
Physical Characteristics						
Dimensions LWH (in)	87 x 36 x 59					
Ship Cube (ft ³)	107					
Wet Weight (lbs)	4200			4240		
Engine	John Deere 6068TF151 6 cylinder, 4 cycle Turbo Diesel, 134 horsepower @ 1800 RPM, 24 VDC starter, liquid cooled, electronic governor. EPA certified					
Instrumentation	Digital controls, Remote Monitoring Capable					
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8.					
Fuel Tank Capacity (Gal)	43					
Performance Characteristics						
Power Rating	60kW (50kW @ 50Hz), 0.8 pf@ 4000ft/120°F; Derate: 3.5%/1000ft from 4000 to 10000ft					
Environmental Capability	-25°F (-50°F With Winterization Kit) to 120°F, rain, humidity, altitude, sand/dust, transportation, cold storage: -60°F, salt spray, fungus, 15° incline.					
Protective Devices	Automatic shut down for overspeed and short circuit. Automatic shut down with emergency bypass for low oil pressure, high temperature, low fuel, and over-voltage. Drop load for under voltage, over current, and reverse power.					
Fuel consumption	4.7 gal/hour @ rated load			4.9 gal/hour @ rated load		
Human Factors	MIL-STD-1474					
Noise	70 dBA @ 7 meters (23 feet)					
Reliability (MTBF)	606 hr @ 80% LCL			542 hr @ 80% LCL		
Maintenance Ratio	less than 0.05					
Electrical Characteristics						
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Marathon (60Hz)/Marelli (400 Hz) a brushless generator.					
EMI	Meets MIL-STD-461C Part 9					
EMP	HAEMP IAW MIL-STD-2169					
Motor load	30% dip, .7 sec to 95% init volt			25% dip, .7 sec to 95% init volt		
Voltage Connection	120/208V, 3ph, 4 wire			240/416V, 3ph, 4 wire		
Frequency	50 Hz	60 Hz	400 Hz	50 Hz	60 Hz	400 Hz
Voltage adj. Range	190 – 213 V	197 - 240 V	197 - 229 V	380 – 426 V	395 - 480 V	395 - 458 V
Freq. adj. Range	± 2 Hz for 50/60 Hz			390 - 410 Hz		
Electrical Performance						
Electric Power Quality	MEP-806B			MEP-816B		
	Frequency	AC Voltage		Frequency	AC Voltage	
Regulation	0.25%	1%		0.25%	1%	
Voltage modulation		1%			1%	
Short term steady state stability (30 sec)	0.5% bandwidth	1% bandwidth		0.5% bandwidth	1% bandwidth	
Long term steady state stability (4 hr)	1% bandwidth	2% bandwidth		1% bandwidth	2% bandwidth	
Application of rated load	transient	4% under	15% dip	1.5% under	15% dip	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Rejection of rated load	transient	4% over	15% rise	1.5% over	15% rise	
	recovery time	2 sec	0.5 sec	2 sec	0.5 sec	
Max waveform deviation factor		5%			5%	
Individual waveform harmonic		2%			2%	

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TABLE A-VII Characteristic Data for MEP-806B and MEP-816B Continued.

Optional Equipment			
Description	NSN	Technical Bulletin	Effect on Dimensions (in)
Winterization kit	6115-01-496-7710	TB 9-6115-645-13	None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-672-14	TO 35C2-3-444-32	TM 09244A/09245A-14	
TM 9-6115-672-24P	TO 35C2-3-444-34	TM 09244A/09245A-24P/3	
TM 9-2815-260-24	TO 38G1-126-2	TM 09244A/09245-24	
TM 9-2815-260-24P	TO 38G1-126-4	TM 09244A/2815-24P/4	
LO 9-6115-645-12			
TB 9-6115-672-24			



MEP-806B or MEP-816B

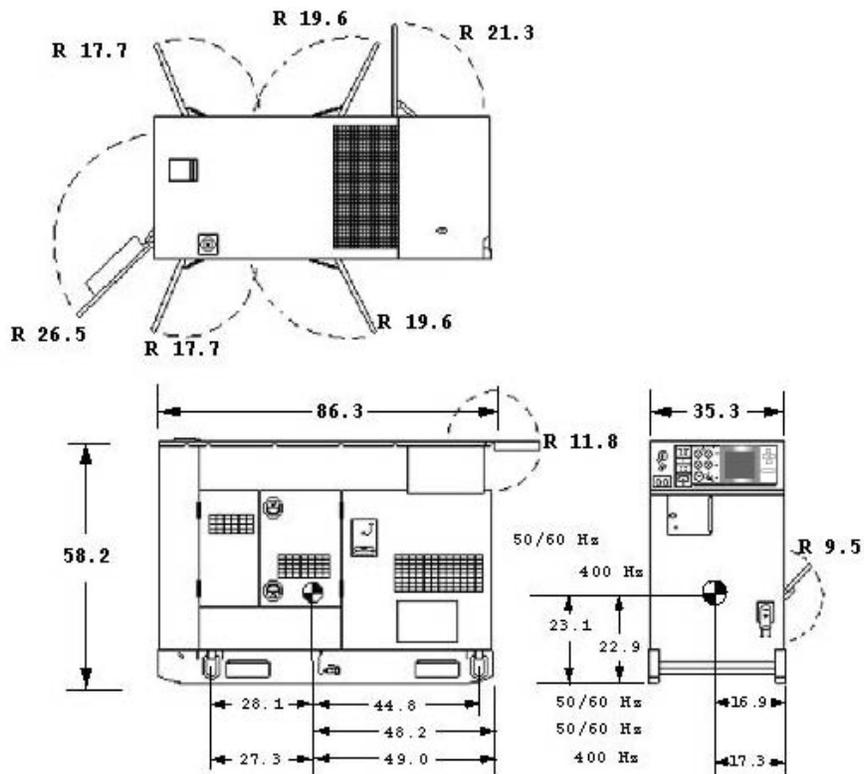
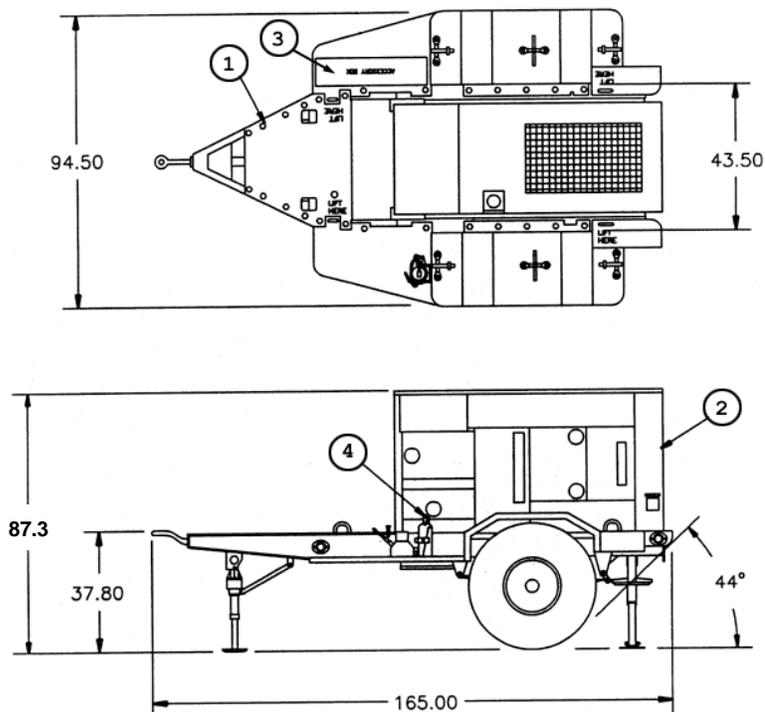


FIGURE A-24 Tactical Quiet Generator Set, DED, 60 kW (re-engine)

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Identification Data			
Model	NSN	LIN	SSN
PU-805B	6115-01-471-1508	G78306	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 88	798	6820	6460
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-663-13&P	MIL-P-53132/18	97403-13228E1616	TA-13230E6851

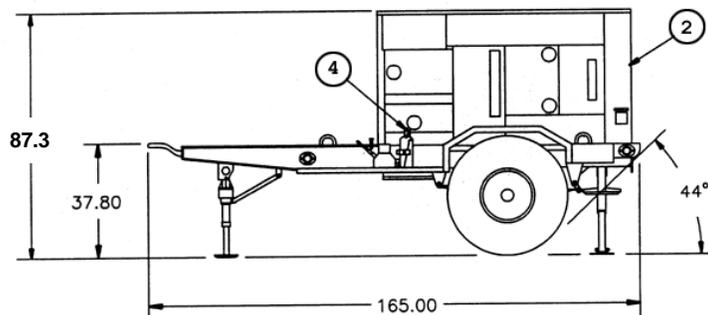
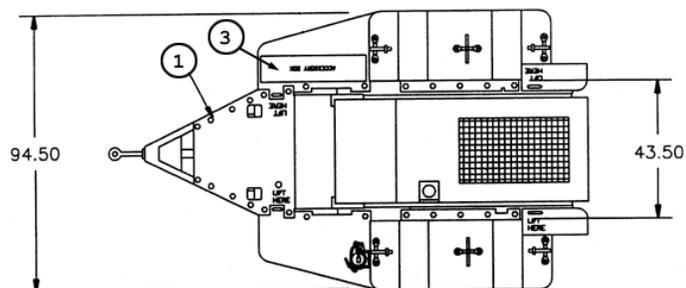


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13229E9632
2	MEP-806B	1	6115-01-462-0291
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-25 PU-805B - TQG Power Unit, 60 kW, 50/60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PU-806B	6115-01-471-1506	G17460	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 88	798	6860	6500
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-663-13&P	MIL-P-53132/19	97403-13228E1616	TA-13230E6852

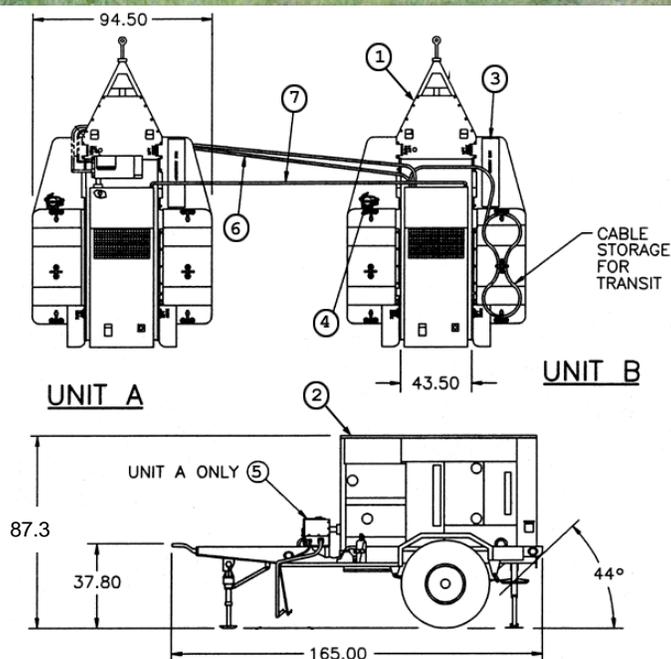


FIND NO.	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13229E9632
2	MEP-816B	1	6115-01-462-0292
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-26 PU-806B - TQG Power Unit, 60 kW, 400 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-41B	6115-01-474-3776	P42194	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 88 each	798 each	Unit A: 6880 Unit B: 6900	Unit A: 6440 Unit B: 6460
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-663-13&P	MIL-P-53132/17	97403-13228E1616	TA-13230E6854



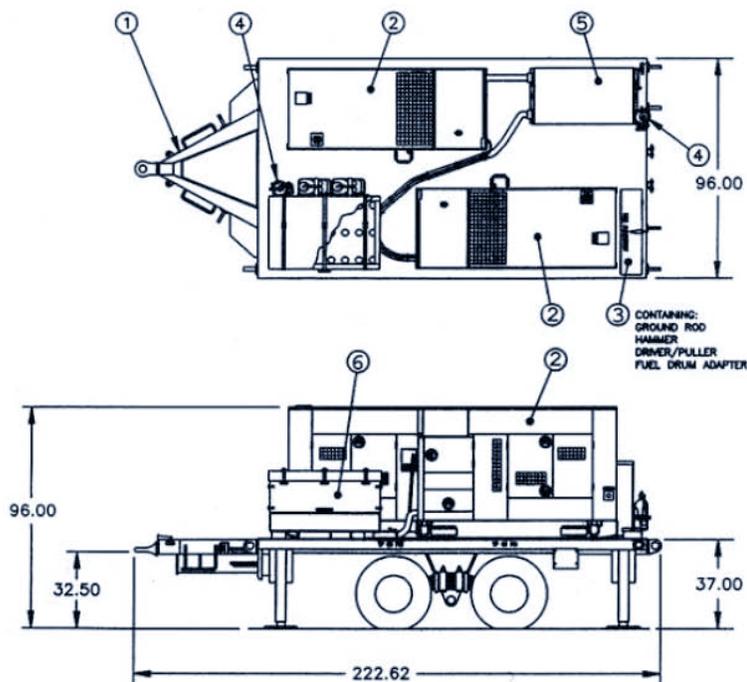
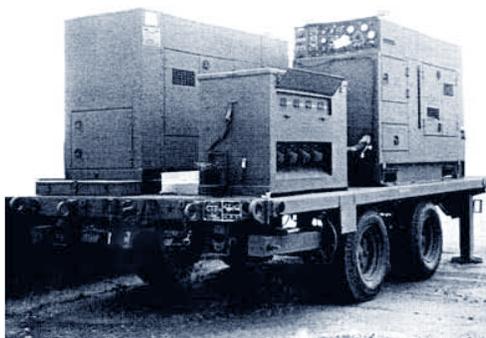
FIND NO.	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	2	97403-13229E9632
2	MEP-806B	2	6115-01-462-0292
3	Accessory box	2	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A)	1	97403-13229E5795-3
6	Cable assembly (unit B)	1	97403-13229E5741
7	Paralleling cable assembly	2	30554-88-22209

FIGURE A-27 PP-AN/MJQ-41B - TQG Power Plant, 60 kW, 50/60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-1612	6115-01-349-1536		M510
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
222.6 x 96.0 x 96.0	1209	14700	15800
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
		97403-13228E1617	TA-13229E9635

NOT TYPE CLASSIFIED FOR ARMY USE



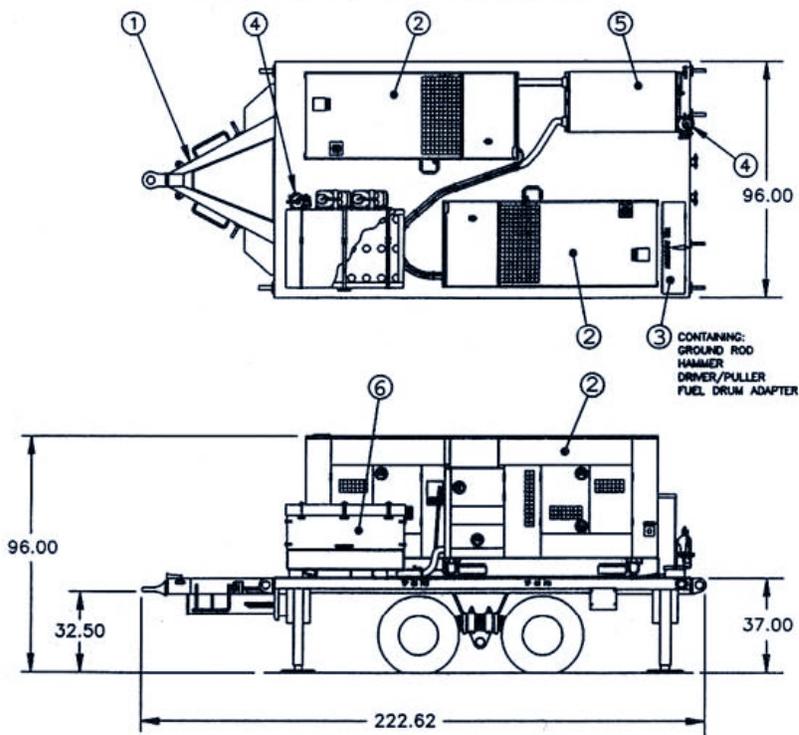
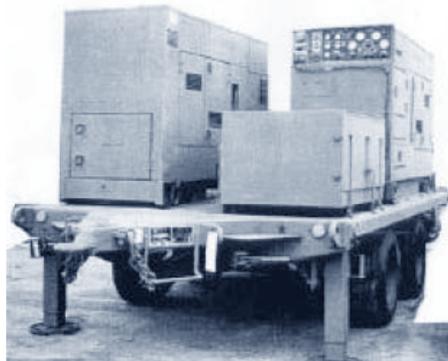
FIND NO.	COMPONENT	QTY	IDENTIFIER
1	AF Trailer Generator Assembly, M1061A1	1	2330-01-573-0985
2	MEP-806B	2	6115-01-462-0291
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box	1	97403-13230E4550
6	Cable storage box	1	97403-13230E4580

FIGURE A-28 PP-AN/MJQ-1612 - TQG Power Plant, DED, 60kW, 50/60 Hz, Air Force PP

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-1632	6115-01-346-0157		M510
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
222.6 x 96.0 x 96.0	1187	14700	15800
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
		97403-13228E1617	TA-13230E4595

- NOT TYPE CLASSIFIED FOR ARMY USE



FIND NO.	COMPONENT	QTY	IDENTIFIER
1	AF Trailer Generator Assembly, M1061A1	1	2330-01-573-0985
2	MEP-816B	2	6115-01-462-0292
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box	1	97403-13230E4550
6	Cable storage box	1	97403-13230E4580

FIGURE A-29 PP-AN/MJQ-1632 - TQG Power Plant, DED, 60kW, 400 Hz, Air Force PP

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A.3.1.8 Tactical Quiet Generator Set, DED, 100 kW

TABLE A-VIII Characteristic Data for MEP-807A

Identification Data				
Model	MEP-807A			
Description	100 kW TQG, 50/60 Hz, DED, Skid Mounted			
NSN	6115-01-296-1463			
LIN	G17596			
SSN	M54400			
Specification				
Trailer Configuration	PU-807A, FIGURE A-31			
Physical Characteristics				
Dimensions LWH (in)	106 x 40 x 65			
Ship Cube (ft ³)	159			
Wet Weight (lbs)	6100			
Engine	Caterpillar – Model: 3126B 4 cyl Turbo Diesel, 282 hp @ 1800 RPM, 24 VDC starter, liquid cooled, electronic governor, EPA certified			
Instrumentation	Digital Display			
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8.			
Fuel Tank Capacity (Gal)	66			
Performance Characteristics				
Power Rating	60 Hz: 100 kW, 0.8 pf @ 4000 ft/95°F, 50 Hz: 83.3 kW, 0.8 pf @ 4000 ft/95°F			
Environmental Capability	-25°F to 120°F, rain, humidity, altitude, sand/ dust, transportation, cold storage: -60°F, salt spray, fungus, 15° incline.			
Protective Devices	Automatic shut down for overspeed and short circuit. Automatic shut down with emergency bypass for low oil pressure, high temperature, low fuel, and over-voltage. Drop load for under voltage, over current, and reverse power.			
Fuel consumption	7.8 gal/hour @ rated load			
Human Factors	MIL-STD-1474.			
Noise	70/68 dBA @ 7 meters (23 feet)			
Reliability (MTBF)	1250 hr			
Maintenance Ratio	0.026 max			
Electrical Characteristics				
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Synchronous. brushless generator			
EMI	Meets MIL-STD-461E			
EMP	HAEMP IAW MIL-STD-2169			
Motor load	40% dip, 5 sec to 95% init volt			
Voltage Connection	120/208V, 3ph, 4 wire		240/416V, 3ph, 4 wire	
Voltage adj. Range	50 Hz	60 Hz	50 Hz	60 Hz
	190 – 213 V	197 - 240 V	380 – 426 V	395 - 480 V
Freq. adj. Range	± 2 Hz			
Electrical Performance				
Electric Power Quality		Frequency	AC Voltage	
Regulation		3%	3%	
Voltage modulation			1%	
Short term steady state stability (30 sec)		2% bandwidth	2% bandwidth	
Long term steady state stability (4 hr)		3% bandwidth	4% bandwidth	
Application of rated load	transient	4% under	20% dip	
	recovery time	4 sec	3 sec	
Rejection of rated load	transient	4% over	30% rise	
	recovery time	4 sec	3 sec	
Max waveform deviation factor			5%	
Individual waveform harmonic			2%	

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TABLE A-VIII Characteristic Data for MEP-807A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Winterization kit			None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-729-10	35 C2-3-519-1	TM07464C-10/1	
TM 9-6115-729-24& P	35 C2-3-519-2	TM07464C-24/2	

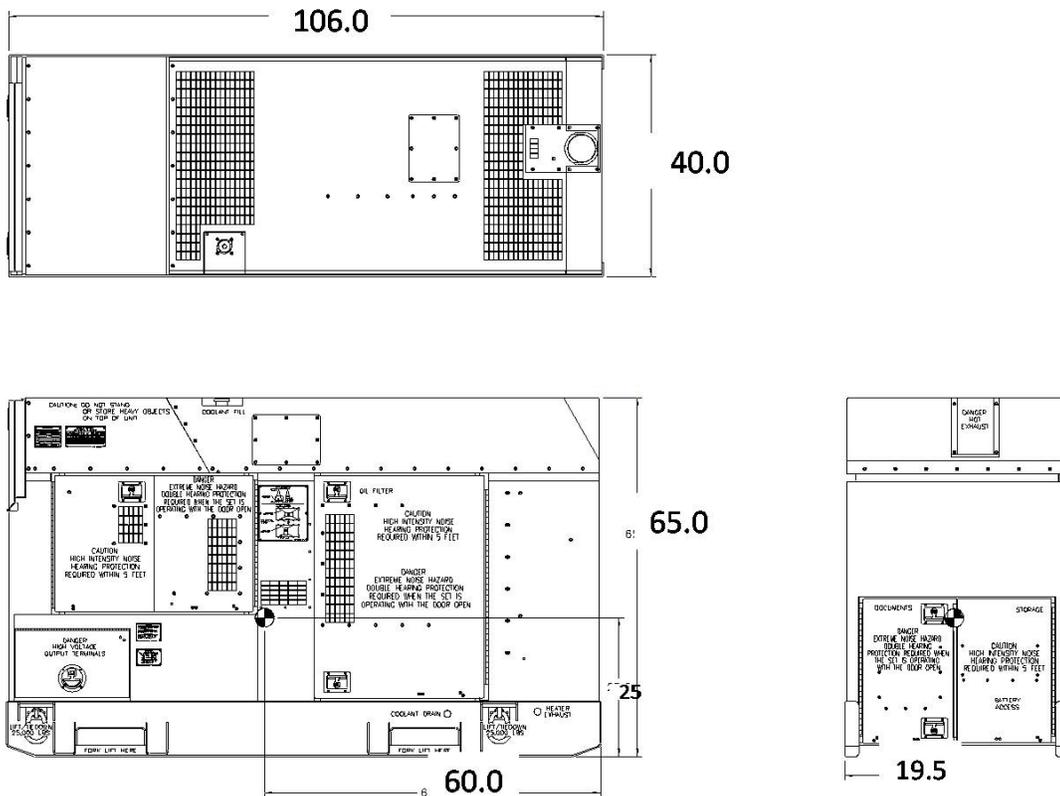
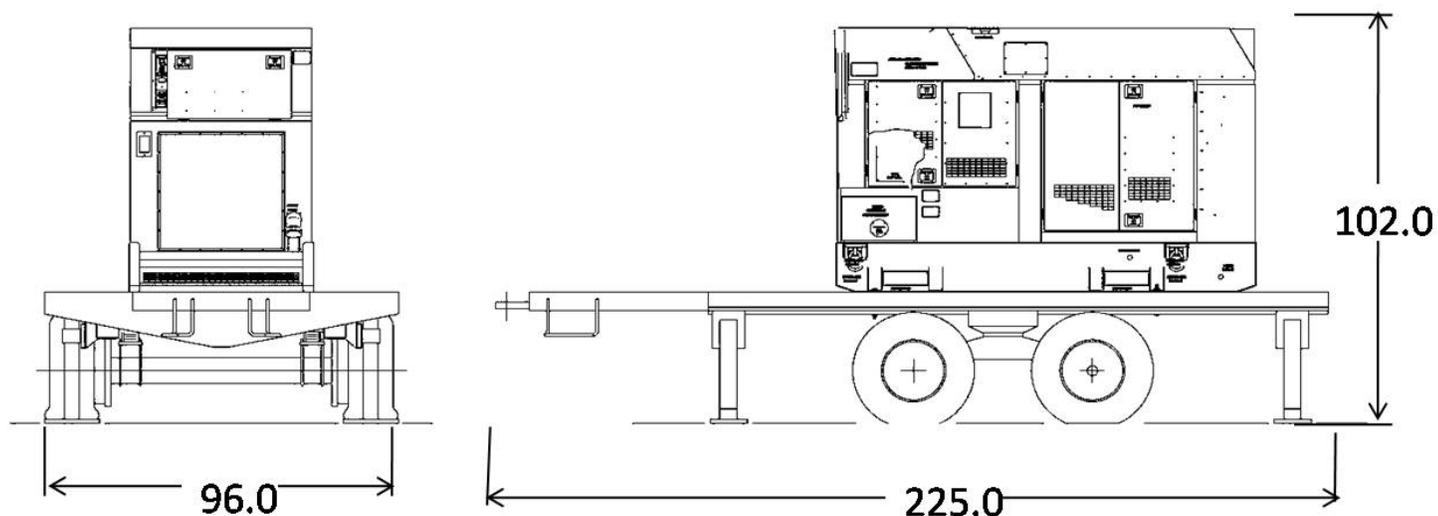


FIGURE A-30 Tactical Quiet Generator Set, DED, 100 kW, 50/60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PU-807A	6115-01-471-7088	G17528	M54400
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
225 x 96 x 102	1275	11620	11620
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
		97403-13228E1717	TA-0116-1910



FIND NO.	COMPONENT	QTY	IDENTIFIER
1	5 Ton modified trailer, M1061A1	1	97403-13230E4570
2	MEP-807A	1	6115-01-296-1463
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-31 PU-807A - TQG Power Unit, 100 kW, 50/60 Hz

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A.3.1.9 Tactical Quiet Generator Set, DED, 200 kW

TABLE A-IX Characteristic Data for MEP-809A

Identification Data				
Model	MEP-809A			
Description	200 kW TQG, 50/60 Hz, DED, Skid Mounted			
NSN	6115-01-296-1462			
LIN	G17664			
SSN	M54400			
Specification				
Trailer Configuration	PU-809A, FIGURE A-33			
Physical Characteristics				
Dimensions LWH (in)	114 x 50 x 75			
Ship Cube (ft ³)	247			
Wet Weight (lbs)	9300			
Engine	Caterpillar – Model: C-12 4 cyl Turbo Diesel, 395 hp @ 1800 RPM, 24 VDC starter, liquid cooled, electronic governor, EPA certified			
Instrumentation	Digital Display			
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8.			
Fuel Tank Capacity (Gal)	128			
Performance Characteristics				
Power Rating	60 Hz: 200 kW, 0.8 pf @ 4000 ft/95°F, 50 Hz: 167 kW, 0.8 pf @ 4000 ft/95°F			
Environmental Capability	-25°F to 120°F, rain, humidity, altitude, sand/ dust, transportation, cold storage: -60°F, salt spray, fungus, 15° incline.			
Protective Devices	Automatic shut down for overspeed and short circuit. Automatic shut down with emergency bypass for low oil pressure, high temperature, low fuel, and over-voltage. Drop load for under voltage, over current, and reverse power.			
Fuel consumption	13.9 gal/hour @ rated load			
Human Factors	MIL-STD-1474			
Noise	70/68 dBA @ 7 meters (23 feet)			
Reliability (MTBF)	600 hr minimum, 850 hr objective			
Maintenance Ratio	TBD			
Electrical Characteristics				
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, synchronous, brushless generator.			
EMI	Meets MIL-STD-461E			
EMP	HAEMP IAW MIL-STD-2169			
Motor load	40% dip, 5 sec to 95% init volt			
Voltage Connection	120/208V, 3ph, 4 wire		240/416V, 3ph, 4 wire	
	50 Hz	60 Hz	50 Hz	60 Hz
Voltage adj. Range	190 – 213 V	197 - 240 V	380 – 426 V	395 - 480 V
Freq. adj. Range	± 2 Hz			
Electrical Performance				
Electric Power Quality		Frequency	AC Voltage	
Regulation		3%	3%	
Voltage modulation			1%	
Short term steady state stability (30 sec)		2% bandwidth	2% bandwidth	
Long term steady state stability (4 hr)		3% bandwidth	4% bandwidth	
Application of rated load	transient	4% under	30% dip	
	recovery time	4 sec	3 sec	
Rejection of rated load	transient	4% over	30% rise	
	recovery time	4 sec	3 sec	
Max waveform deviation factor			5%	
Individual waveform harmonic			2%	

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TABLE A-IX Characteristic Data for MEP-809A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Winterization kit			None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM9-6115-730-10	35C2-3-520-1	NONE	
TM 9-6115-730-24& P	35C2-3-520-2		

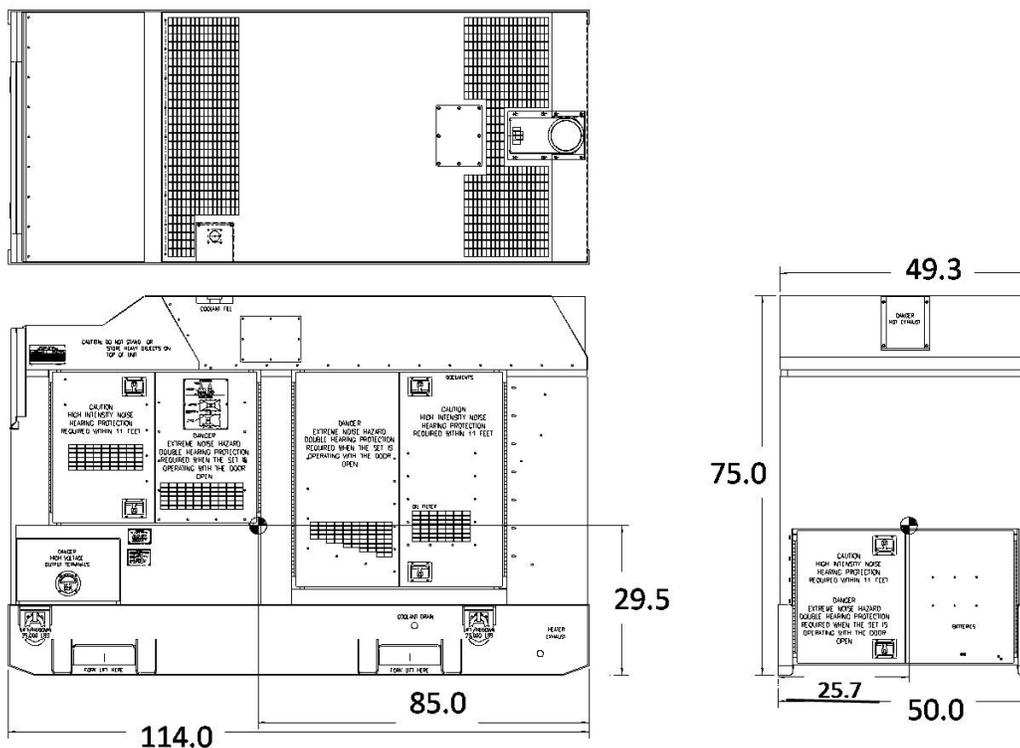
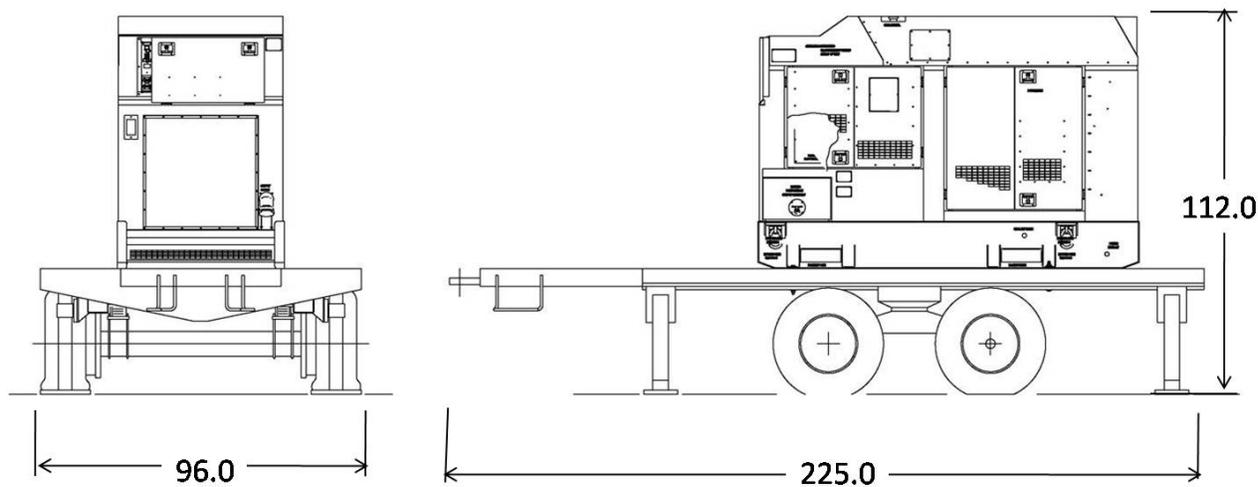


FIGURE A-32 Tactical Quiet Generator Set, DED, 200 kW

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Identification Data			
Model	NSN	LIN	SSN
PU-809A	6115-01-471-7085	G26395	M54400
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
225 x 96 x 112	1400	14780	14780
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
		97403-13228E1718	TA-0116-2910



FIND NO.	COMPONENT	QTY	IDENTIFIER
1	5 Ton modified trailer, M1061A1	1	97403-13230E4570
2	MEP-809A	1	6115-01-296-1462
3	Accessory box	1	97403-13229E7940
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE A-33 PU-809A - TQG Power Unit, 200 kW, 50/60 Hz

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A.3.1.10 DPGDS, DED, 750 kW

TABLE A-X Characteristic Data for MEP-810B

Identification Data		
Model	MEP-810B (Highway transport)	
Description	750 kW, 50/60 Hz, DED	
NSN	6115-01-486-4032	
LIN	Z00221	
SSN		
Specification		
Trailer Configuration	Integral Highway trailer mounted – FIGURE A-34	
Physical Characteristics		
Dimensions LWH (in)	264 x 96 x 130	
Ship Cube (ft ³)	1907	
Wet Weight (lbs)	28580 (Dry)	
Engine	Diesel (2), 692 x 2 horsepower @ 1800 RPM, Model: Caterpillar 3456EPG, 24 VDC starter.	
Instrumentation	Voltmeter, frequency meter, ammeter, hour-meter, oil pressure, battery charging ammeter.	
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8.	
Fuel Tank Capacity (Gal)	120 (day tank)	
Performance Characteristics		
Power Rating	750 kW , 0.8 pf lagging @ 4000 ft/125°F	
Environmental Capability	-25°F to 125°F for system. Rain, humidity, altitude, sand/dust, Air, road, rail transportable, vibration, cold storage, salt spray, fungus, 15° incline.	
Protective Devices	Automatic shut down with emergency bypass for low oil pressure, coolant high-temperature, and over-voltage, time over-current.	
Fuel consumption	60 gal/hour @ rated load	
Human Factors	MIL-STD-1474	
Noise	85 dBA @ 7 meters (23 feet)	
Reliability (MTBF)	Greater than 650 hrs	
Maintenance Ratio		
Electrical Characteristics		
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, permanent magnet pilot excited, two Caterpillar SR4B 50/60 Hz generators.	
EMI	Meets MIL-STD-461E	
EMP	HAEMP IAW MIL-STD-2169	
Motor load	N/A	
Voltage Connection	2200/3800 V, 3 phase, 4 wire (50 Hz)	2400/4160 V, 3 phase, 4 wire (60 Hz)
Voltage adj. Range	3400 – 4000 V	3720 – 4400 V
Freq. adj. Range	±3%	
Electrical Performance		
Electric Power Quality	Frequency	AC Voltage
Regulation	3%	3%
Voltage modulation		1%
Short term steady state stability (30 sec)	1% bandwidth	2% bandwidth
Long term steady state stability (4 hr)	2% bandwidth	2% bandwidth
Application of rated load	transient	3% under
	recovery time	4 sec
Rejection of rated load	transient	5% over
	recovery time	6 sec
Max waveform deviation factor		5%
Individual waveform harmonic		3%

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TABLE A-X Characteristic Data for MEP-810B Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Winterization kit			None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-484-14	TO 35C2-3-518-1	none	
TM 9-6115-484-24P	TO 35C2-3-518-4		

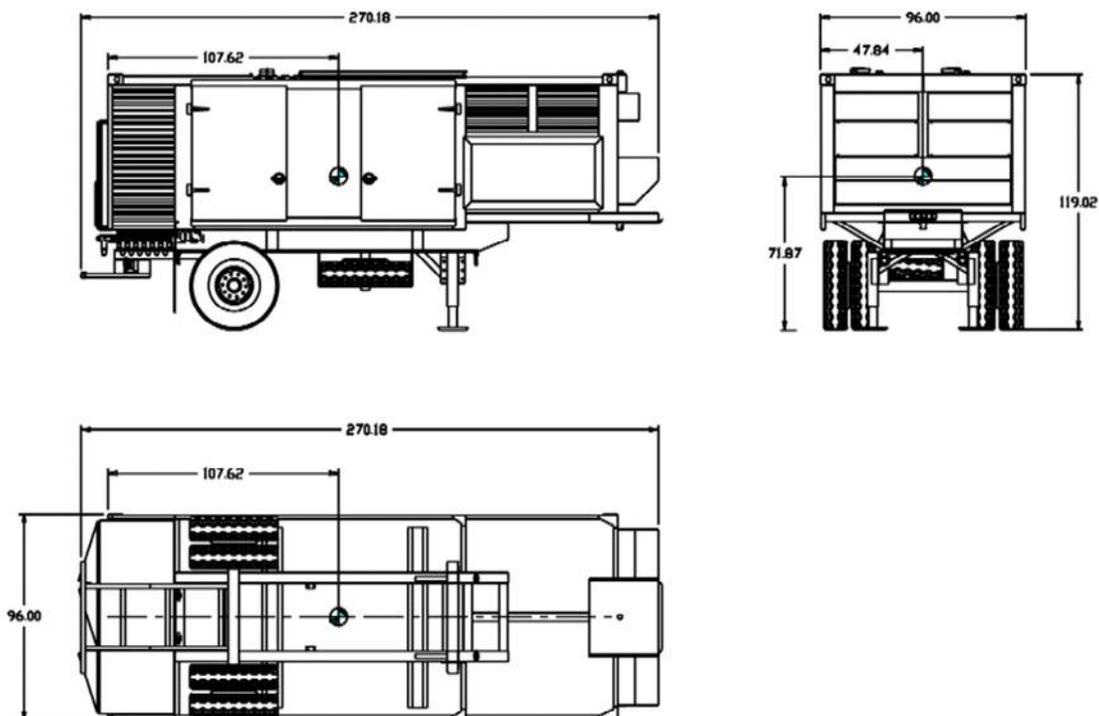


FIGURE A-34 MEP-810B – DPGDS, DED, 750 kW, 50/60 Hz

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APPENDIX B

POWER DISTRIBUTION SYSTEMS

2.1 SCOPE

2.1.1 Scope. This Appendix provides information on various DoD service specific Power Distribution Systems. Data contained in this Appendix is provided to assist both field operation and materiel developer personnel to select power distribution equipment that will best meet their needs. This Appendix is included for informational purposes only.

2.1.2 Appendix organization. The characteristic data for the Power Distribution Systems (see [TABLE B-I](#)) is arranged by number of phases, current rating per phase and utility.

TABLE B-I Guide to Power Distribution Systems Characteristic Data.

<u>BRANCH</u>	<u>MODEL NO.</u>	<u>ITEM DESCRIPTION</u>	<u>FIGURE</u>	<u>Pg.</u>
ARMY	M200 A/P	200 amp/phase Feeder System - 3 Phase	FIGURE B-1	78
	M100 A/P	100 amp/phase Feeder System - 3 Phase	FIGURE B-3	80
	M40 A/P	40 amp/phase Distribution System - 3 Phase	FIGURE B-5	82
	M60 A/P	60 amp Distribution System - 1 Phase	FIGURE B-7	84
	M46	Electrical Kit, Utility Receptacle	FIGURE B-9	86
	SUA 60/40	Universal Adapter	FIGURE B-11	88
MARINES	DB-30NA-A22-S3	MEPDIS-R – 5kW Outdoor PDB	FIGURE B-12	89
	DB-30NA-AQQ-S3	MEPDIS-R – 5kW Indoor PDB	FIGURE B-14	91
	DB-60MA-F22QS3	MEPDIS-R – 15kW PDB	FIGURE B-16	93
	DB100MA-P22QS3	MEPDIS-R – 30kW PDB	FIGURE B-18	95
	DB350MA-P2WAS3	MEPDIS-R – 100kW PDB	FIGURE B-20	97
	DB350MA-P2WQS	MEPDIS-R – 300kW PDB	FIGURE B-22	99
NAVY	ASSEMBLY 30208	480-208Y/120V 15kVA Portable Distribution Center	FIGURE B-24	101
	ASSEMBLY 30209	480-208Y/120V 30kVA Portable Distribution Center	FIGURE B-26	103
	ASSEMBLY 30030	Panel Power Distribution 200Amp 120V 3PH 5-Wire LEX	FIGURE B-28	105
	ASSEMBLY 30133	Distribution Center Portable 208Y/120V 60 Amp (15kW)	FIGURE B-30	107
	ASSEMBLY 30211	GFI 10kW-208/120V 3 Phase 30 Amps Distribution Center Portable	FIGURE B-31	108
	ASSEMBLY 32600	480V 3 Phase 400 Amps Weatherproof Panel board Assembly Portable	FIGURE B-33	110
	PWR DIST PNL 60kW	Panel Power Distribution Box 200 Amp (60kW)	FIGURE B-35	112
AIR FORCE	Not applicable			

DETAILED DESCRIPTIONS

2.2 Detailed Descriptions. Detailed descriptions are contained in the characteristic data found in [B.2.1.1](#) through [B.2.1.19](#).

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2.2.1.1 PDISE, 200 Amp per Phase Feeder System - 3 Phase. The Army supported M200 is used to distribute 3 phase power from 60, 100 and 200 kW MEPGS.

Identification Data		
MODEL	M200 A/P Electrical Feeder System	
DESCRIPTION	120/208V, 3 phase, 200 amp/phase.	
CIRCUIT BREAKERS	Hydraulic-magnetic	
NSN	LIN	SSN
6150-01-308-5672	F55689	R45500
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
33.5 x 23.0 x 20.4	9.1	140

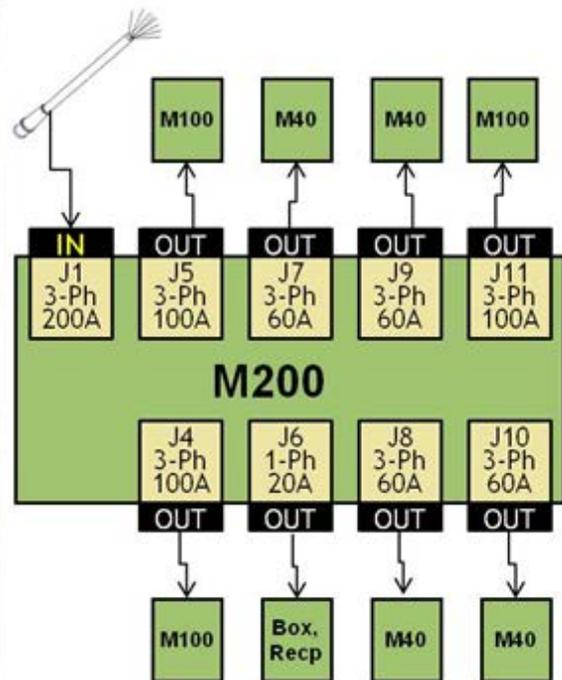
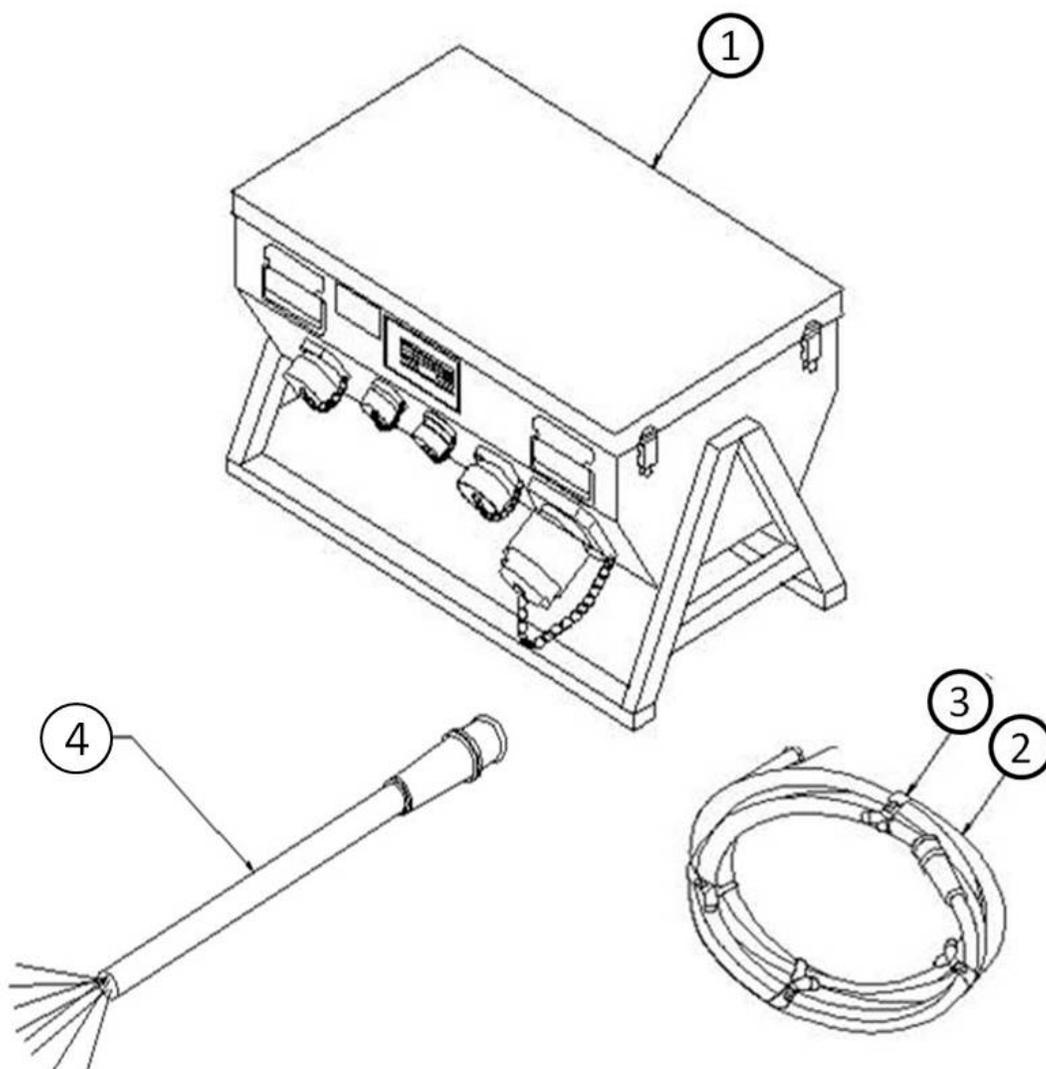


FIGURE B-1 PDISE, M200 Configuration

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FIND NO.	COMPONENT	QTY
1	Electrical Feeder Center: 3 phase 120/208V, 200 amp/phase	1
2	Service/Feeder Cable: 50 ft(15.2m), 200 amp/phase, 8 pin	4
3	Double Strap Cable Carrier	16
4	Pigtail Cable: 4ft (1.2m), 200 amp/phase, 8 pin	1

FIGURE B- 2 PDISE, M200 Components

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2.2.1.2 PDISE, 100 Amp per Phase Feeder System - 3 Phase. The Army supported M100 is used to distribute 3 phase power from 30, 60, 100 and 200 kW MEPGS.

Identification Data		
MODEL	M100 A/P Electrical Feeder System	
DESCRIPTION	120/208 V, 3 phase, 100 amp/phase.	
CIRCUIT BREAKERS	Hydraulic-magnetic	
NSN	LIN	SSN
6150-01-308-5671	F55621	R45400
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
24.3 x 22.4 x 20.4	6.4	77

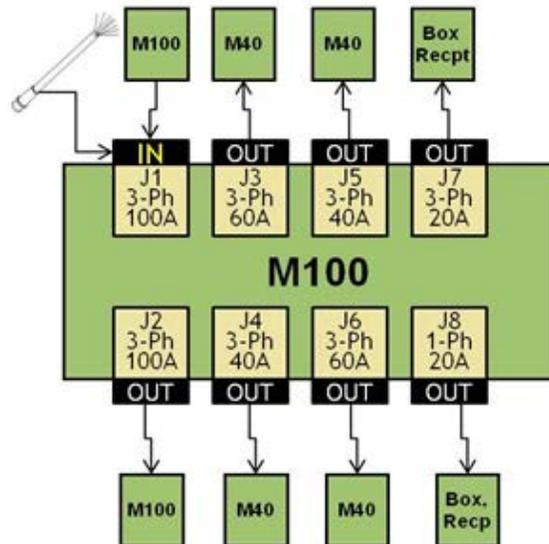
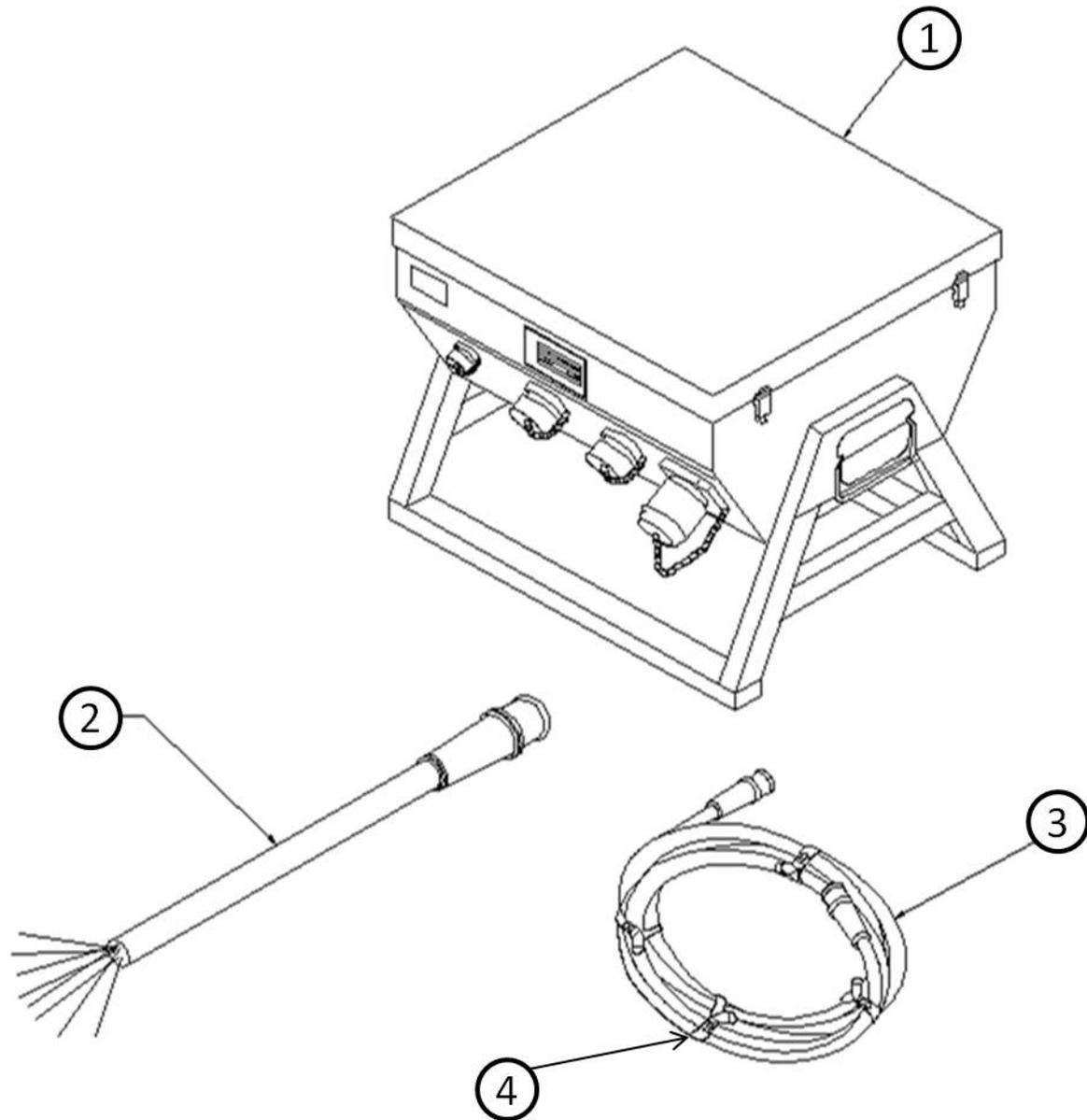


FIGURE B- 3 PDISE, M100 Configuration

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FIND NO.	COMPONENT	QTY
1	Electrical Feeder Center: 3 phase 120/208V, 100 amp/phase	1
2	Pigtail Cable: 4ft (1.2m), 100 amp/phase, 8 pin	1
3	Service/Feeder Cable: 50 ft(15.2m), 100 amp/phase, 8 pin	2
4	Double Strap Cable Carrier	8

FIGURE B- 4 PDISE, M100 Components

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2.2.1.3 PDISE, 40 Amp per Phase Distribution System - 3 Phase. The Army supported M40 is used to distribute power from 10 through 200 kW MEPGS.

Identification Data		
MODEL	M40 A/P Electrical Distribution System	
DESCRIPTION	120/208 V, 3 phase, 40 amp/phase. Includes distribution center, cables, carrying straps, receptacles and storage container	
CIRCUIT BREAKERS	hydraulic-magnetic	
NSN	LIN	SSN
6150-01-307-9446	F55485	R45300
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
24.3 x 21.8 x 16.1	4.9	55

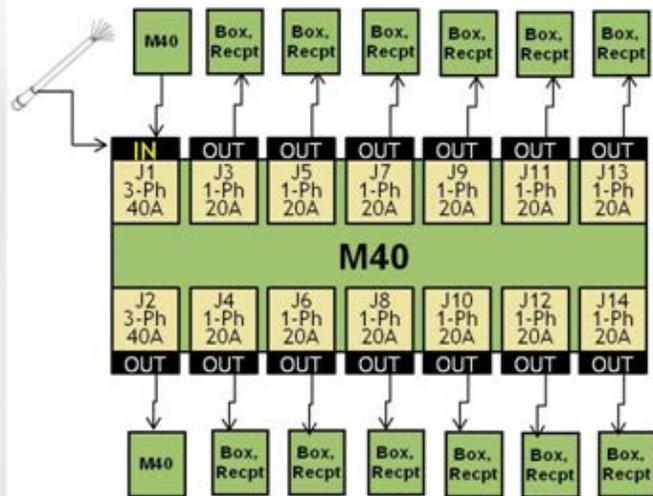
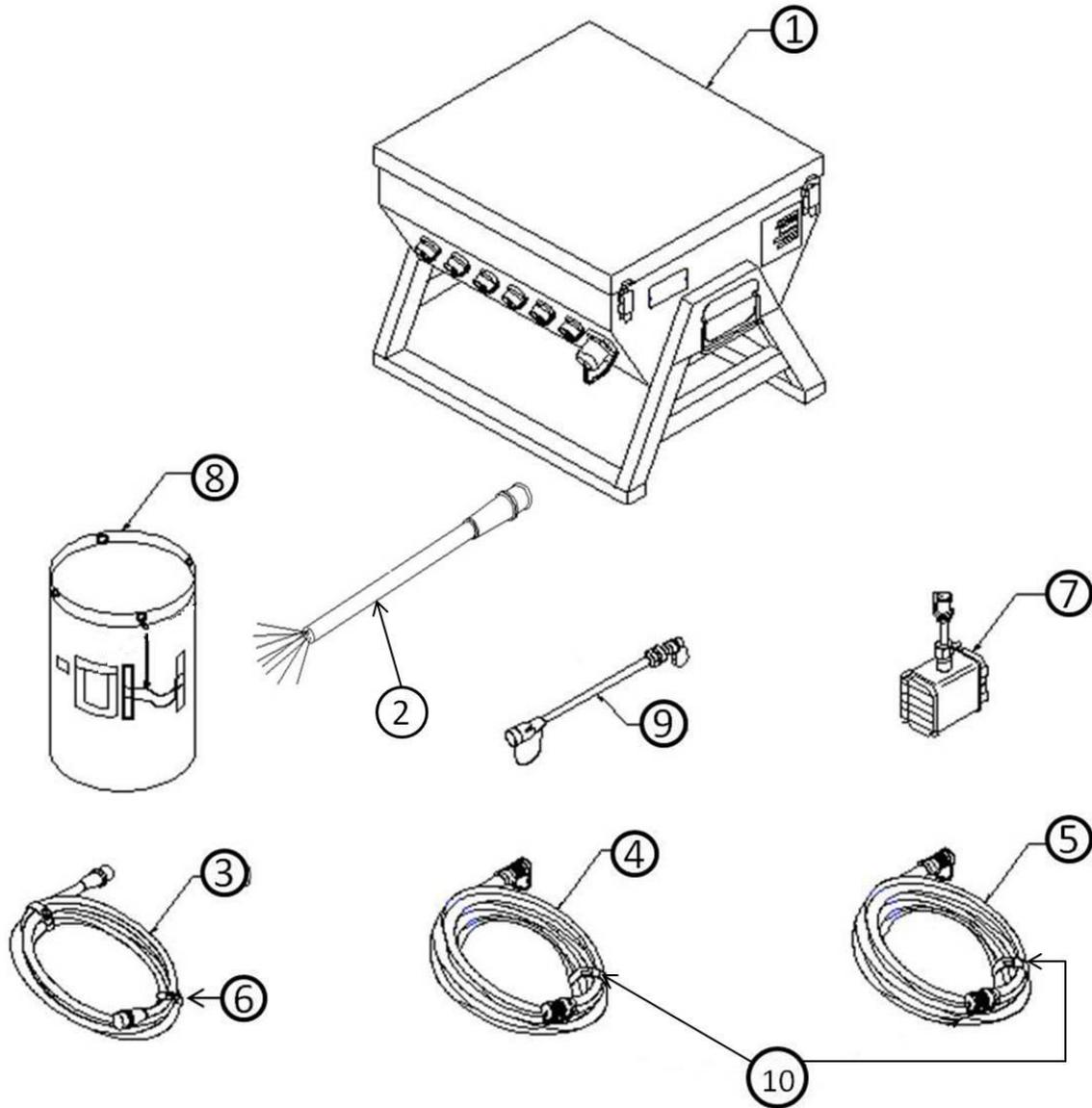


FIGURE B- 5 PDISE, M40 Electrical Feeder Center

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FIND NO.	COMPONENT	QTY
1	Distribution Center: 3 phase 120/208V, 40 amp/phase	1
2	Pigtail Cable: 4ft (1.2m), 40/60 amp/phase, 3 pin	1
3	Service/Feeder Cable: 100 ft (30.48m), 40/60 amp/phase, 3 pin	2
4	Extension Cable 25ft (7.6m) 20 amp/phase, 3 pin	3
5	Extension Cable 50ft (15.2m) 20 amp/phase, 3 pin	3
6	Cable Carrying Strap	4
7	Box Receptacle, 120V, 20 amp	1
8	Transit and Storage Container	1
9	Interface Cable	2
10	Single Strap Cable Carrier	6

FIGURE B- 6 PDISE, M40 Components

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2.2.1.4 60 Amp Distribution System - Single Phase. The Army supported M60 is used to distribute single phase power from 5 through 15 kW MEPGS and single phase output from feeder systems.

Identification Data		
MODEL	M60 A/P Electrical Distribution System	
DESCRIPTION	120 V, 1 phase, 60 amp distribution center	
CIRCUIT BREAKERS	Hydraulic-magnetic	
NSN	LIN	SSN
6150-01-307-9445	F55553	R45200
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
24.3 x 21.8 x 15.5	4.7	45

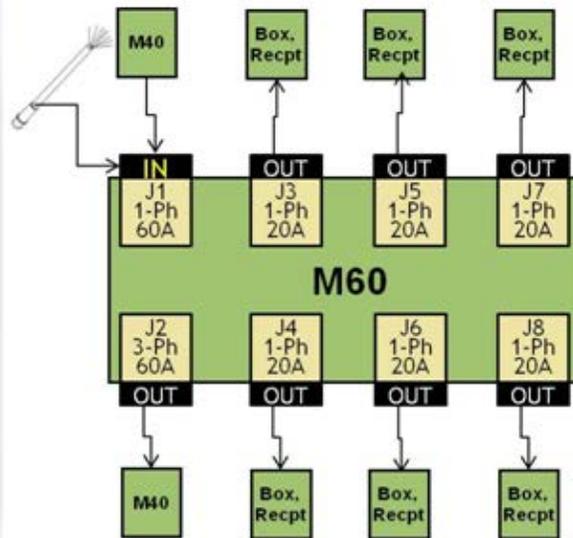
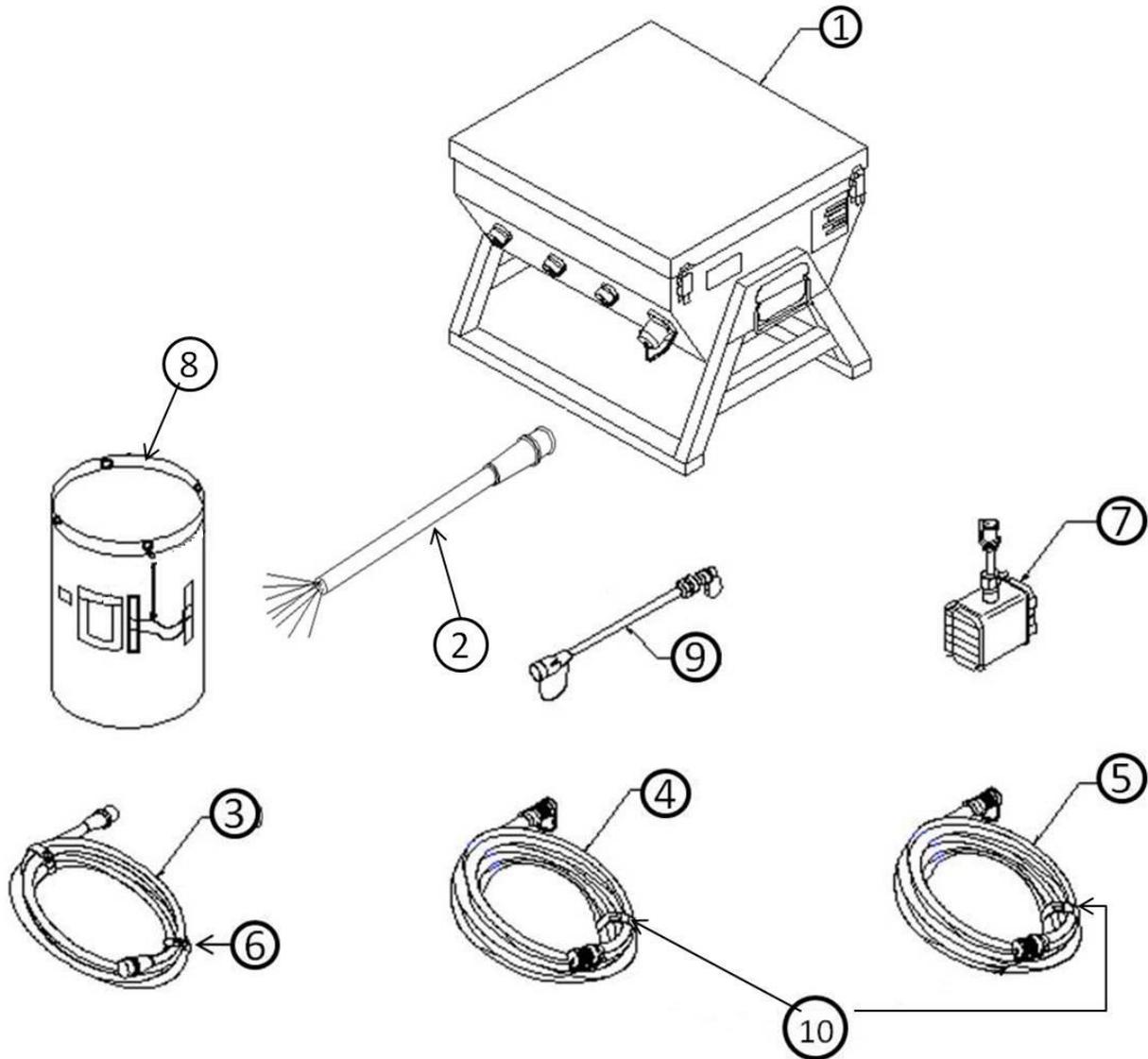


FIGURE B- 7 PDISE, M60 Electrical Distribution System

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FIND NO.	COMPONENT	QTY
1	Electrical Feeder Center	1
2	Pigtail Cable, 4ft (1.2m), 60 amp, 8 pin	1
3	Cable, 60 amp, 100 ft (30.5m)	1
4	Cable, 20 amp, 25 ft (7.6m)	3
5	Cable, 20 amp, 50 ft (15.3m)	3
6	Cable Carrying Strap	4
7	Receptacle Box	1
8	Transit and Storage Container	1
9	Transition Cable 25 Outlet Light Set	2
10	Single Strap Cable Carrier	6

FIGURE B- 8 PDISE, M60 Components

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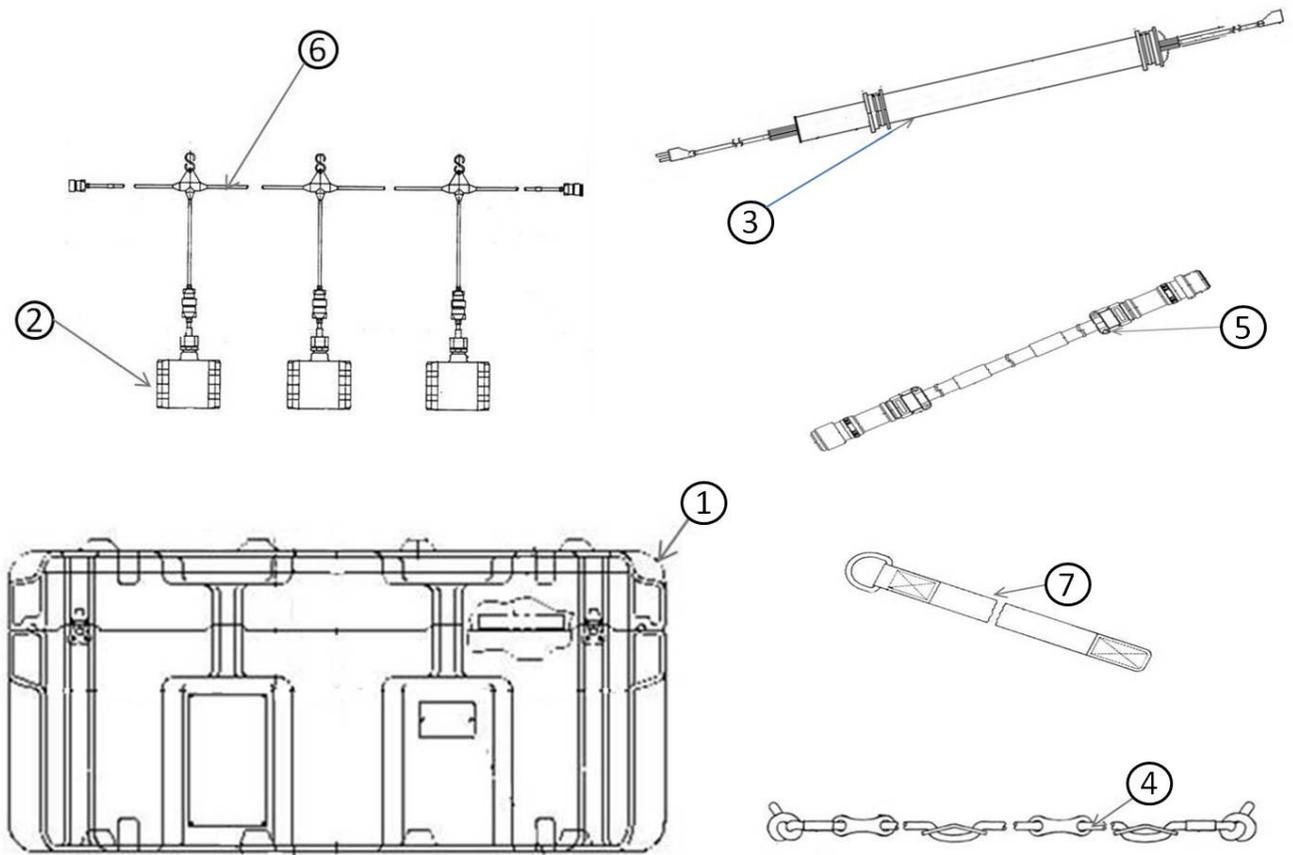
2.2.1.5 Utility Receptacles and Lighting Set. The Army supported M46 is used to distribute power from a distribution system to electrical receptacles and lighting.

Identification Data		
MODEL	M46 Electrical Utility Kit	
DESCRIPTION	Extension cords, utility receptacles and lighting sets	
NSN	LIN	SSN
6150-01-208-9751	U89185	R62800
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
16.0 x 16.0 x 26.0	3.9	85



FIGURE B- 9 PDISE, M46

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FIND NO.	COMPONENT	QTY
1	Transit and Storage Container	1
2	Receptacle Box 120V 20 amp	6
3	Fluorescent Utility Light	2
4	Support Rope Assembly, 53 ft (16.2m)	2
5	Extension Cables, 25 ft (7.6m)	6
6	Branch Circuit Cable Assembly 24 ft (7.3m) 20 amp, 3 pin	2
7	Single Strap Cable Carrier	8

FIGURE B- 10 PDISE, M46 Components

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2.2.1.6 Universal Adapter. The Army Supported Universal Adapter is designed to connect user electrical equipment, without military standard connectors, to the electrical power distribution equipment.

Identification Data		
MODEL	SUA 60/40	
DESCRIPTION	The Universal Adapter consists of a box with a 5-pin, 3-phase 40/60 amp input connector and five terminals. The box includes an insulated wrench for tightening/loosening the terminals.	
NSN	LIN	SSN
5975-01-247-4791		
DIMENSION: LWD in inches	SHIP CUBE (ft ³)	WEIGHT (lbs)
20.9 x 15.4 x 16	2.98	35.7



FIGURE B- 11 Universal Adapter

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2.2.1.7 MEPDIS-R – 5kW Outdoor PDB. The Marine supported 5kW Non-Ground Fault Circuit Interrupter (GFCI) protected, outdoor model Power Distribution Box (PDB) can be directly fed from either a 100kW MEPDIS-R Box, 30kW MEPDIS-R Box or a 15 kW MEPDIS-R Box. The outputs can feed up to six 20 Amp Single Phase 5kW MEPDIS-R Cord Sets or "Y" cords, and up to three single phase 30 Amp receptacles.

Identification Data		
MODEL	DB-30NA-A22-S3	
DESCRIPTION	Input	Output
	Circuit Breaker Protection 5 wire, 3-phase, 30 amp Pin & Sleeve	Pin and Sleeve Receptacles: 6 each: 3 wire, 1-phase, 20 amps 3 each: 3 wire, 1-phase, 30 amps
CIRCUIT BREAKERS		
NSN	TAMCN	ID
6110-01-532-1821	B00287B	11186A
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
19 X 18 X 14	2.77	48

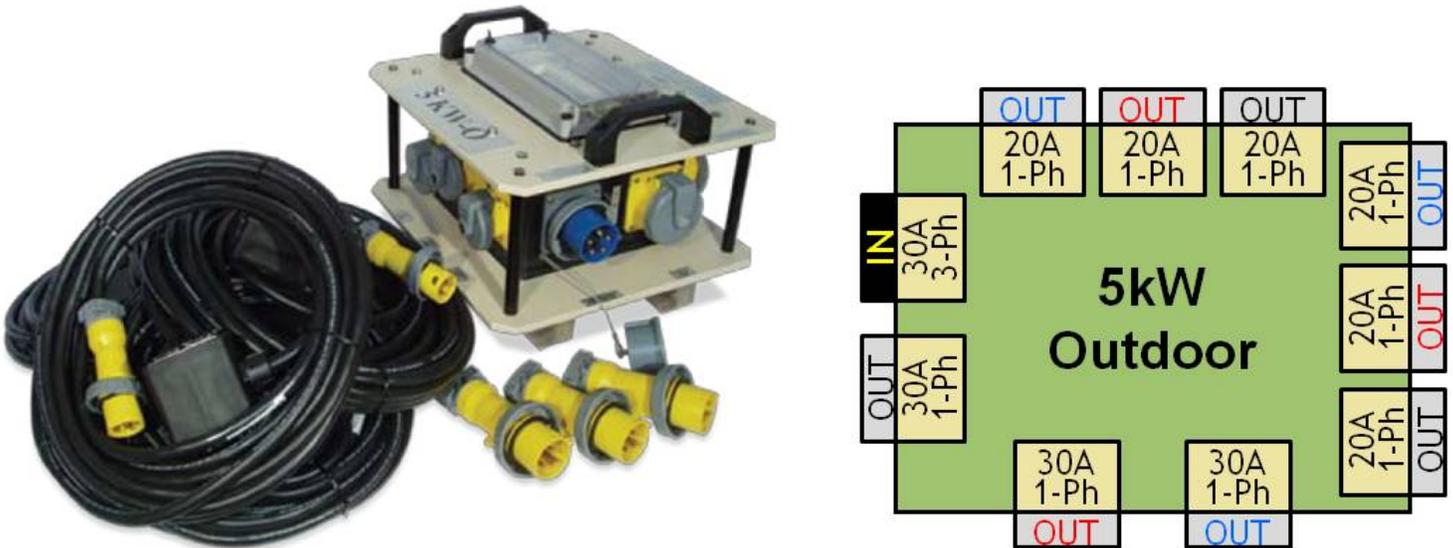
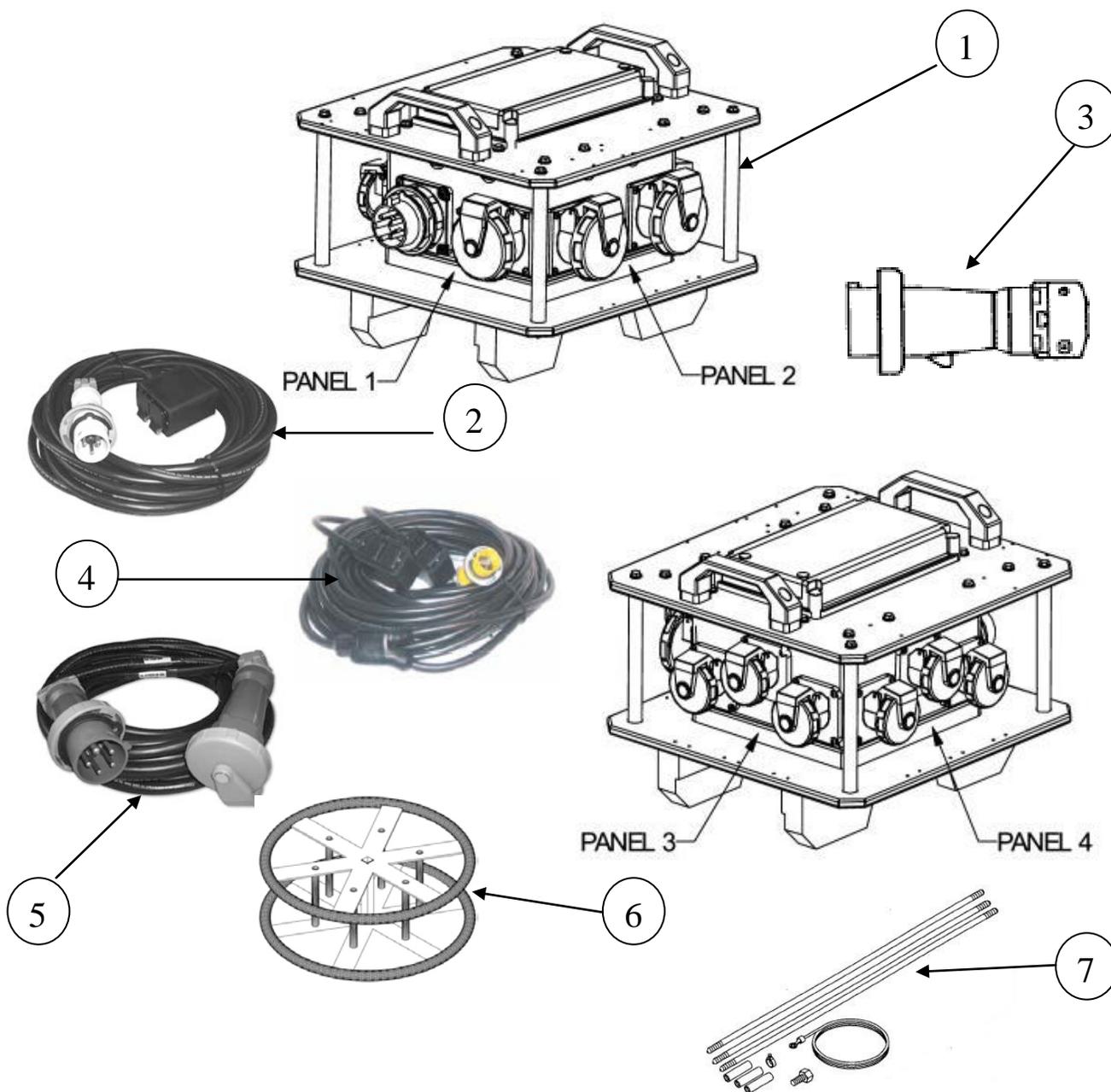


FIGURE B- 12 5kW Outdoor PDB Configuration

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FIND NO.	COMPONENT	QTY
1	5kW Outdoor PBD	1
2	Cord Set: 50 ft(15.2m), 10/3 SEOW provides two 5-15 duplex receptacles	6
3	Connector, Plug, Electrical: 30A, single phase, straight shape, external coupling w/strain relief	3
4	“Y” Cable Assembly, Electrical – Provides split duplex receptacles	3
5	Cable Assembly, Power, Electrical: 50 Ft, 30A Cable Jump, Set #3, used to feed 5kW	1
6	Reel, Cable, Small: 11 in. wide, O.D.. 30 in.	1
7	Rod, Ground: stl; 3 sect; 0.625-11 IA in. UNC thd; 6 AWG; 72 in. ground wire; 0.625 in. dia. 108.000 in. oa lg	1

FIGURE B- 13 MEPDIS-R 5kW Outdoor PDB Components

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2.2.1.8 MEPDIS-R – 5kW Indoor PDB. The Marine supported 5kW GFCI protected, indoor model Power Distribution Box (PDB) can be directly fed from either a 100 kW Box, 30kW Box or a 15 kW Box. The nine 20 Amp single phase GFCI Duplex Receptacles can be used to feed up to nine 5kW MEPDIS-R Indoor Cord Sets or additional equipment..

Identification Data		
MODEL	DB-30NA-AQQ-S3	
DESCRIPTION	Input	Output
	Circuit Breaker Protection 5 wire, 3-phase, 30 amp Pin & Sleeve	9 each: 3 wire, 1-phase, 120 VAC 20A GFCI Duplex Receptacles
CIRCUIT BREAKERS		
NSN	TAMCN	ID
6110-01-532-1794	B00277B	11185A
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
19 X 19 X 14	2.77	49.5

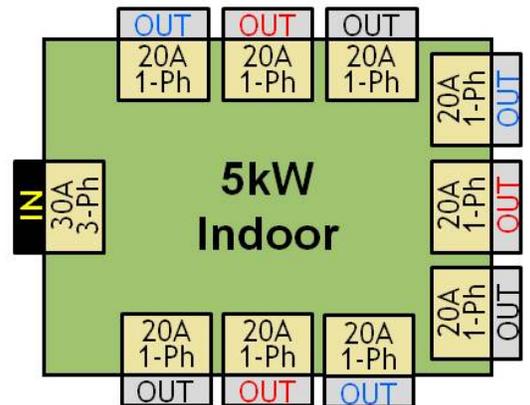
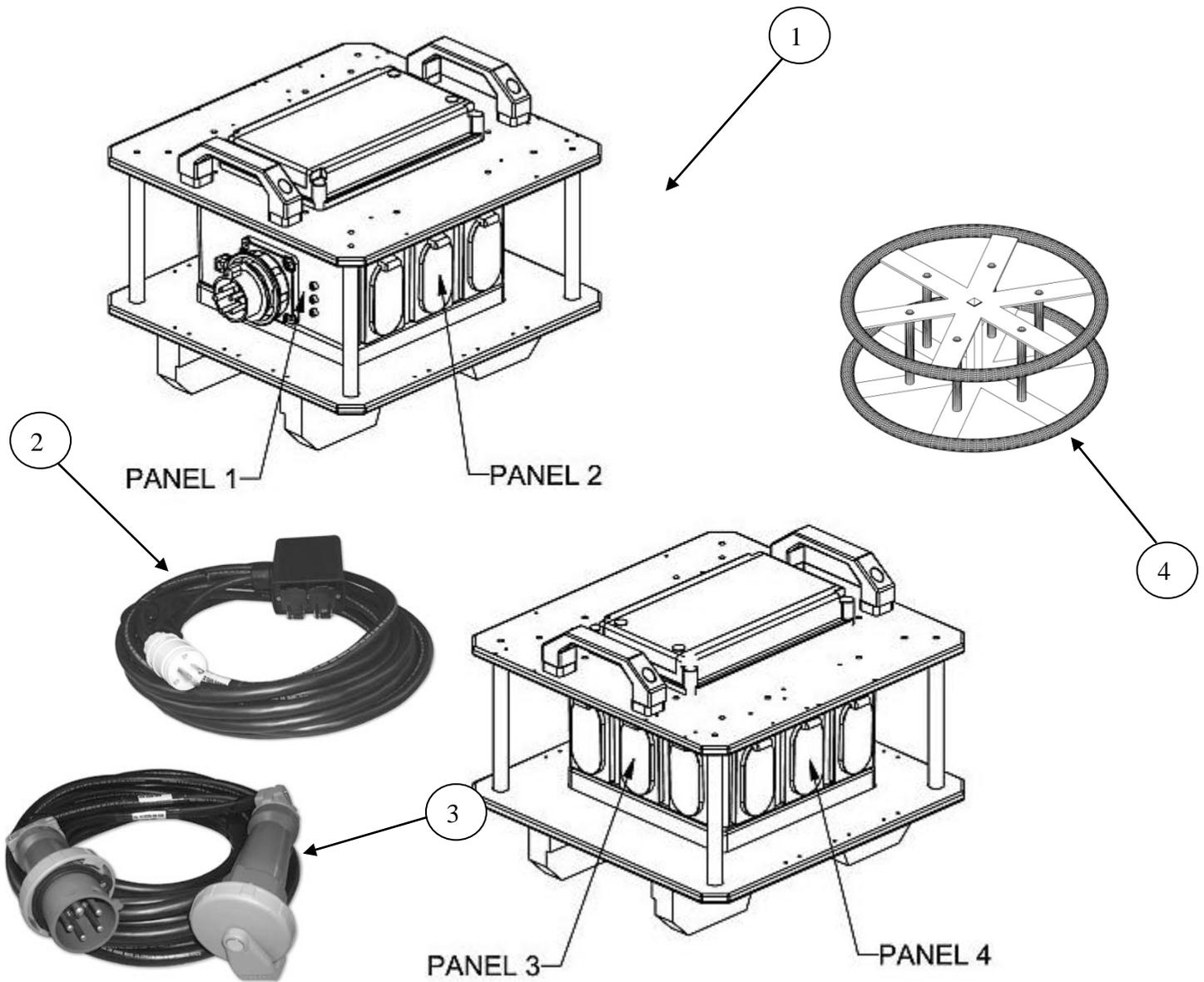


FIGURE B- 14 5kW Indoor PDB Configuration

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FIND NO.	COMPONENT	QTY
1	5kW Indoor PDB	1
2	Cable Assembly, Special Purpose, Electrical: Provides Duel Duplex Receptacles	6
3	Cable Assembly, Power, Electrical: 50 ft, 30A cable jump, set #3, 15kW-5kW	1
4	Reel, Cable, Small: 11 in. wide, O.D. 30 in	1

FIGURE B- 15 MEPDIS-R 5kW Indoor PDB Components

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2.2.1.9 MEPDIS-R – 15kW PDB. The Marine supported 15kW model Power Distribution Box (PDB) can be directly fed from either a 100kW MEPDIS-R Box, 30kW Box, or up to two synchronized 60 Amp 3 Phase external power sources, independently or simultaneously. The outputs can be used to feed up to four 30 Amp 3 Phase 5kW MEPDIS-R Boxes; and up to four 20 Amp Single Phase 5kW MEPDIS-R Outdoor Cord Sets or "Y" Cords, has one 20Amp GFCI Duplex Receptacle.

Identification Data		
MODEL	DB-60MA-F22QS3	
DESCRIPTION	Input	Output
	Circuit Breaker Protection 2 each: 5 wire, 3-phase 60 amp Pin & Sleeve	Circuit Breaker Protection 4 each: 5 wire, 3-ph,30amp Pin & Sleeve 4 each: 3 wire, 1-ph,20amp Pin & Sleeve 1 each: 3 wire, 1-ph, 120 VAC 20A GFCI Duplex Receptacle
CIRCUIT BREAKERS		
NSN	TAMCN	ID
6110-01-532-1764	B0029	11183A
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
26 X 23 X 17	5.8	83

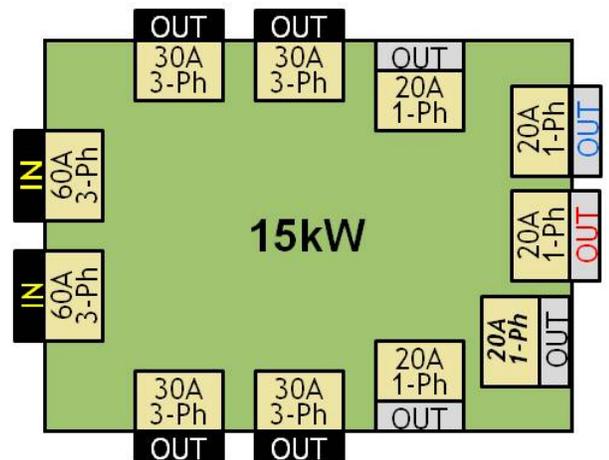
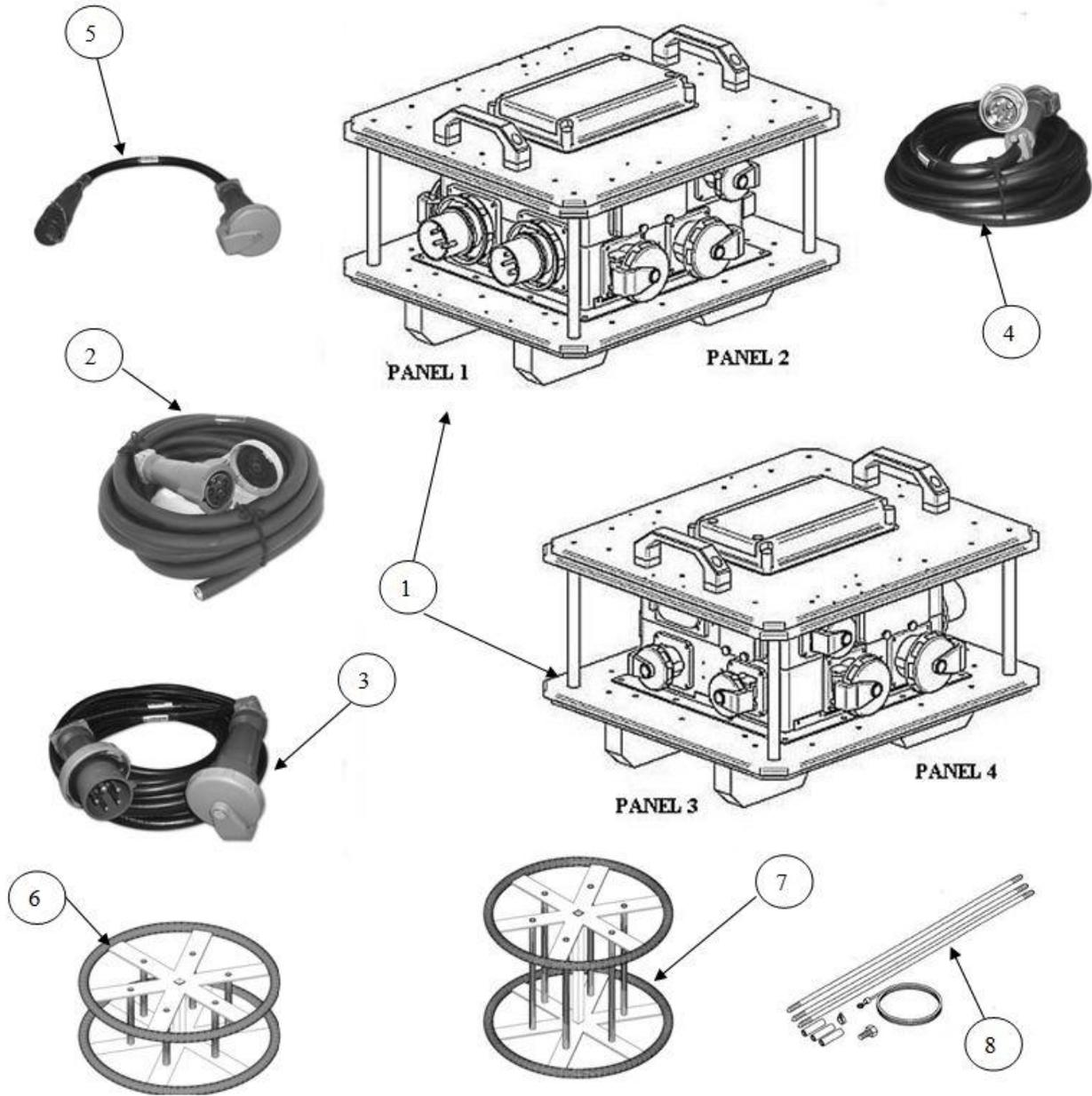


FIGURE B- 16 15kW PDB Configuration

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FIND NO.	COMPONENT	QTY
1	MEPDIS-R 15 kW PDB	1
2	Cable Assembly, Power, Electrical: 50 ft, 60A input cable, set #1, pigtail 15kW	2
3	Cable Assembly, Power , Electrical: 50 ft, 30A cable jump, set #3, 15kW-5kW	2
4	Cable Assembly, Power, Electrical: 50 ft, 60A, cable jump, set #4, 30kW-15kW	1
5	Cable Assembly, Power, Electrical: 3 ft, 60A, adapter cable, set #9, 15kW	1
6	Reel, Cable, Small: 11 in. wide, O.D. 30 in.	1
7	Reel, Cable, Large: 22 in. wide, O.D. 30 in.	1
8	Rod, Ground: stl; 3 sect; 0.625-11 IA in. UNC thd; 6 AWG; 72 in. ground wire; 0.625 in. dia. 108.000 in. oa lg	1

FIGURE B- 17 MEPDIS-R 15kW PDB Components

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2.2.1.10 MEPDIS-R – 30kW PDB. The Marine supported 30kW model Power Distribution Box (PDB) can be directly fed from either a 300 kW MEPDIS-R Box, 100 kW MEPDIS-R Box or up to two 100 Amp 3 Phase external power sources, independently or simultaneously. The outputs can be used to feed up to four 60 Amp 3 Phase 15kW MEPDIS-R Boxes; up to two 30 Amp 3 Phase 5kW boxes; up to two 20 Amp 3 Phase outlets; up to two 20 Amp Single Phase 5 kW MEPDIS-R Outdoor Cord sets or "Y" Cords, and has one 20Amp GFCI Duplex Receptacle.

Identification Data		
MODEL	DB100MA-P22QS3	
DESCRIPTION	Input	Output
	Circuit Breaker Protection 2 each: 5 wire, 3-phase, 100 amp Pin & Sleeve	Circuit Breaker Protection 4 each: 5 wire, 3-ph, 60amp Pin & Sleeve 2 each: 5 wire, 3-ph, 30amp Pin & Sleeve 2 each: 5 wire, 3-ph, 20amp Pin & Sleeve 2 each: 3 wire, 1-ph, 20amp Pin & Sleeve 1 each: 3 wire, 1-ph, 120 VAC 20A GFCI Duplex Receptacle
CIRCUIT BREAKERS		
NSN	TAMCN	ID
6110-01-532-1809	B0030	11184A
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
36 X 26 X 19	10	174

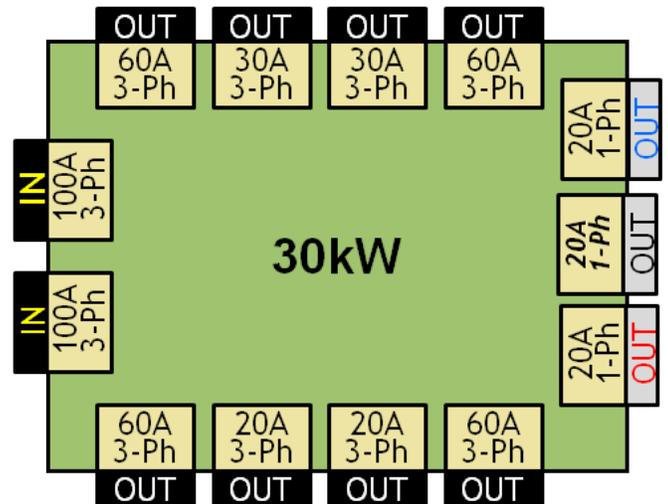
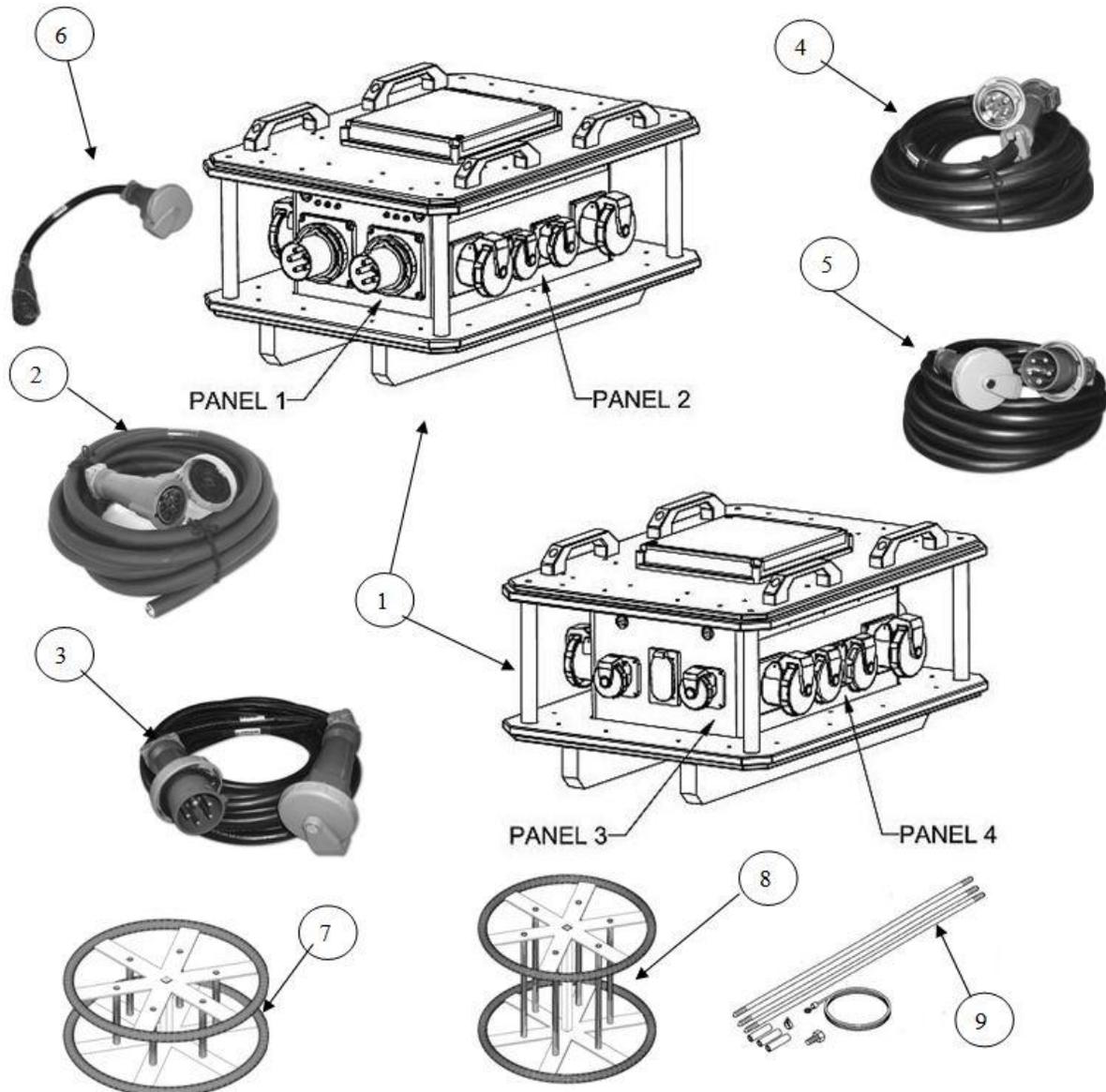


FIGURE B- 18 30kW PDB Configuration

**MIL-STD-633F
APPENDIX B**



FIND NO.	COMPONENT	QTY
1	MEPDIS-R 30kW PDB	1
2	Cable Assembly, Power, Electrical: 50 ft, 100A input cable, pigtail, set #2, 30kW	2
3	Cable Assembly, Power, Electrical: 50 ft, 30A cable jump, set #3, 15kW-5kW;	2
4	Cable Assembly, Power, Electrical: 50 ft, 60A, cable jump, set #4, 30kW-15kW	4
5	Cable Assembly, Power, Electrical: 50 ft, 100A, cable jump, set #5, 100kW-30kW	1
6	Cable Assembly, Power, Electrical: 3 ft, 60A adapter cable, set #10, 30kW	1
7	Reel, Cable, Small: 11 in. wide, O.D. 30 in.	1
8	Reel, Cable, Large: 22 in. wide, O.D. 30 in.	2
9	Rod, Ground: stl; 3 sect; 0.625-11 IA in. UNC thd; 6 AWG; 72 in. ground wire; 0.625 in. dia. 108.000 in. oa lg	1

FIGURE B- 19 MEPDIS-R 30kW PDB Components

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APPENDIX B**

2.2.1.11 MEPDIS-R – 100 kW PDB. The Marine supported 100kW Power Distribution Box (PDB) can be directly fed from 300kW MEPDIS-R Box, or directly from up to two synchronized, 400 Amp 3-Phase external power sources, either independently or simultaneously. The 100kW MEPDIS-R Box will feed one 200 Amp output; up to four 100 Amp 3-phase 30kW MEPDIS-R Boxes; up to two 60 Amp 3-phase 15kW MEPDIS-R Boxes; up to two 30 Amp 3-Phase 5kW MEPDIS-R Boxes; up to two 3 phase 20 Amp Outlets; up to (2) 20 Amp single phase 5kW MEPDIS-R Outdoor Cord sets or "Y" Cords, and has one 20Amp GFCI Duplex Receptacle.

Identification Data		
MODEL	DB350MA-P2WAS3	
DESCRIPTION	Input	Output
	Cam Type, 5 wire 2 each: 400 amp switch	Circuit Breaker Protection 1 each: Cam Type, 200Amp, 5 wire connection 4 each: 5 wire, 3-ph, 100amp Pin & Sleeve 2 each: 5 wire, 3-ph, 60 amp Pin & Sleeve 2 each: 5 wire, 3-ph, 30 amp Pin & Sleeve 2 each: 5 wire, 3-ph, 20 amp Pin & Sleeve 2 each: 3 wire, 1-ph, 20 amp Pin & Sleeve 1 each: 3 wire, 1-ph, 120 VAC 20A GFCI Duplex Receptacle
CIRCUIT BREAKERS		
NSN	TAMCN	ID
6110-01-532-1835	B0031	11182A
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
36 X 26 X 32	17.23	306

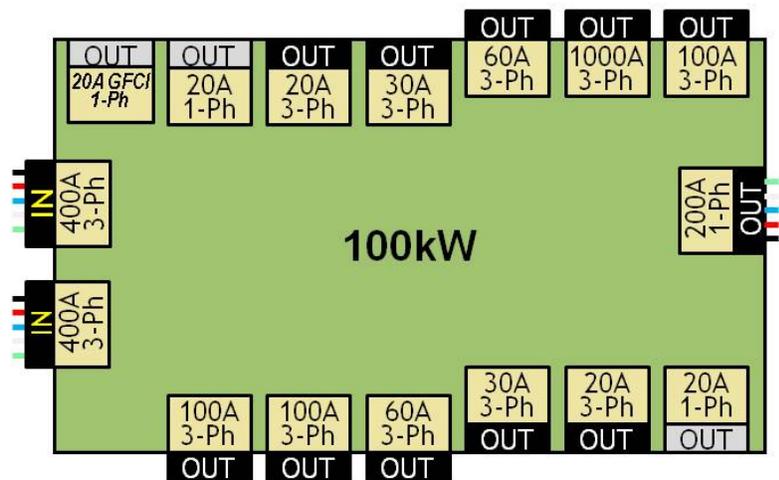
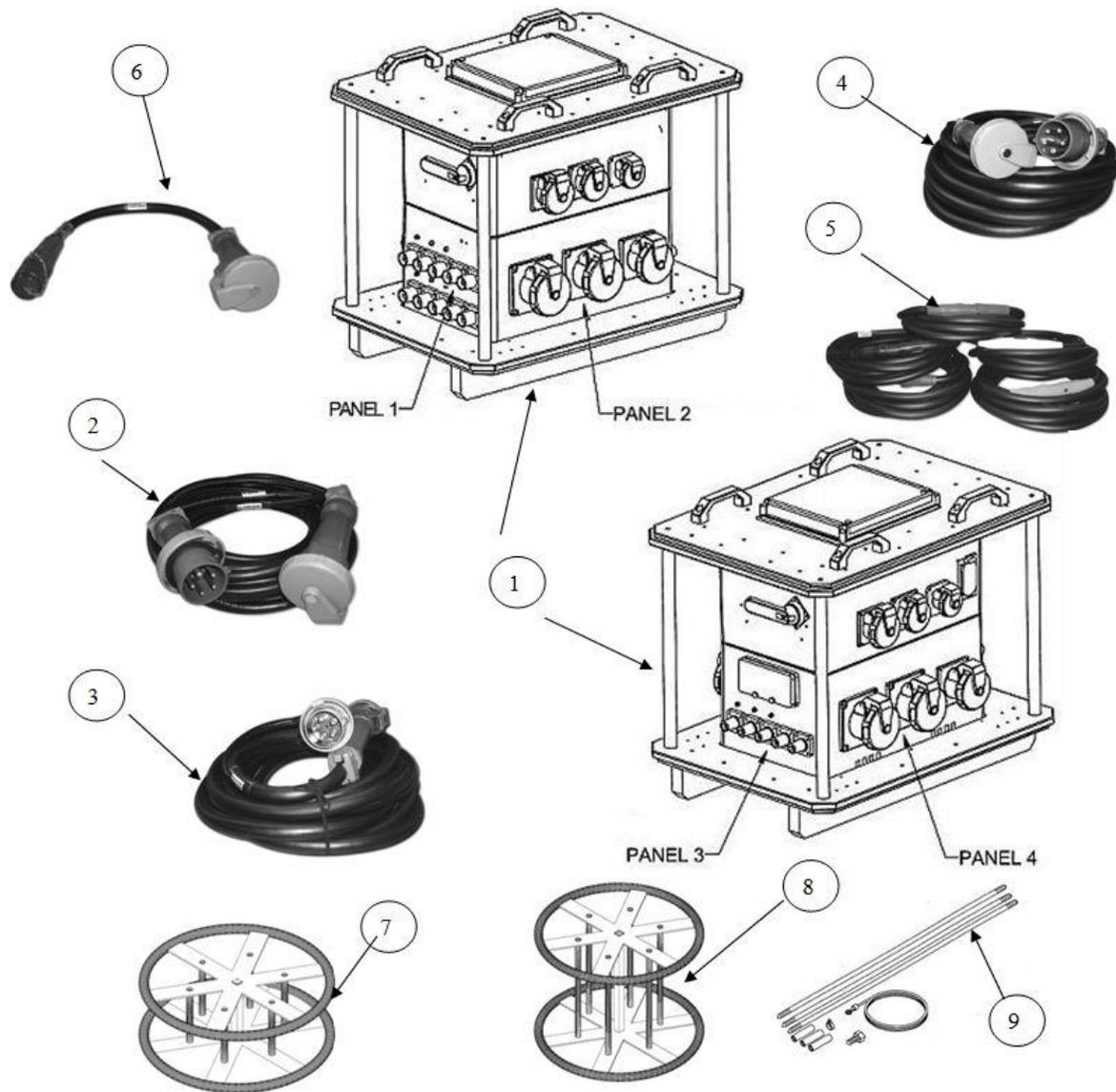


FIGURE B- 20 100 PDB Configuration

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FIND NO.	COMPONENT	QTY
1	MEPDIS-R 100 kW PBD	1
2	Cable Assembly, Power, Electrical: 50 ft, 30A cable jump, set #3, 15kW-5kW	1
3	Cable Assembly, Power, Electrical: 50 ft, 60A, cable jump, set #4, 30kW-15kW;	2
4	Cable Assembly, Power, Electrical: 50 ft, 100A, cable jump, set #5, 100kW-30kW;	4
5	Cable Assembly, Power, Electrical: 25 ft, 400A, feeder cable, set #6, (5) cables per	3
6	Cable Assembly, Power, Electrical: 3 ft, 100A, adapter cable, set #8, 100kW;	1
7	Reel, Cable, Small: 11 in. wide, O.D. 30 in.	3
8	Reel, Cable, Large: 22 in. wide, O.D. 30 in.	3
9	Rod, Ground: stl; 3 sect; 0.625-11 IA in. UNC thd; 6 AWG; 72 in. ground wire; 0.625 in. dia. 108.000 in. oa lg	1

FIGURE B- 21 MEPDIS-R 100 kW PDB Components

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APPENDIX B**

2.2.1.12 MEPDIS-R – 300 kW PDB. The Marine supported 300 kW Power Distribution Box (PDB) can be directly fed by 3 synchronized, 400 Amp, 3 phase, external power sources, either independently or simultaneously. The 400 Amp, 3 phase outputs can be used to feed additional equipment, or up to two 100kW MEPDIS-R Boxes and/or two 100 Amp 3 Phase 30kW MEPDIS-R boxes, and has a 20Amp GFCI Duplex Receptacle.

Identification Data		
MODEL	DB350MA-P2WQS	
DESCRIPTION	Input	Output
	Cam Type, 5 wire 3 each: 400 amp switch	Circuit Breaker Protection 2 each: Cam Type, 400Amp, 5 wire connection 2 each: 5 wire, 3-ph, 100amp Pin & Sleeve 1 each: 3 wire, 1-phase, 120 VAC 20A GFCI Duplex Receptacle
CIRCUIT BREAKERS		
NSN	TAMCN	ID
6110-01-532-1776	B0032	11187A
Physical Characteristics		
DIMENSION: LWD in inches	SHIP CUBE (ft³)	WEIGHT (lbs)
36 X 26 X 32	17.23	320

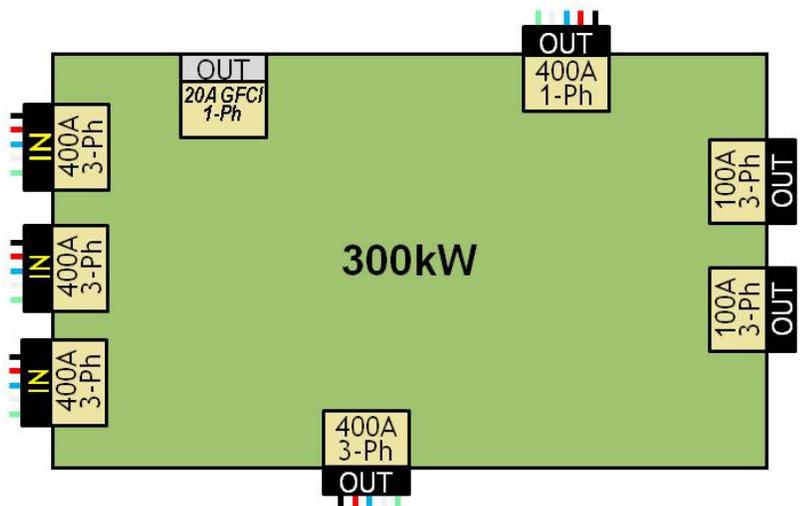
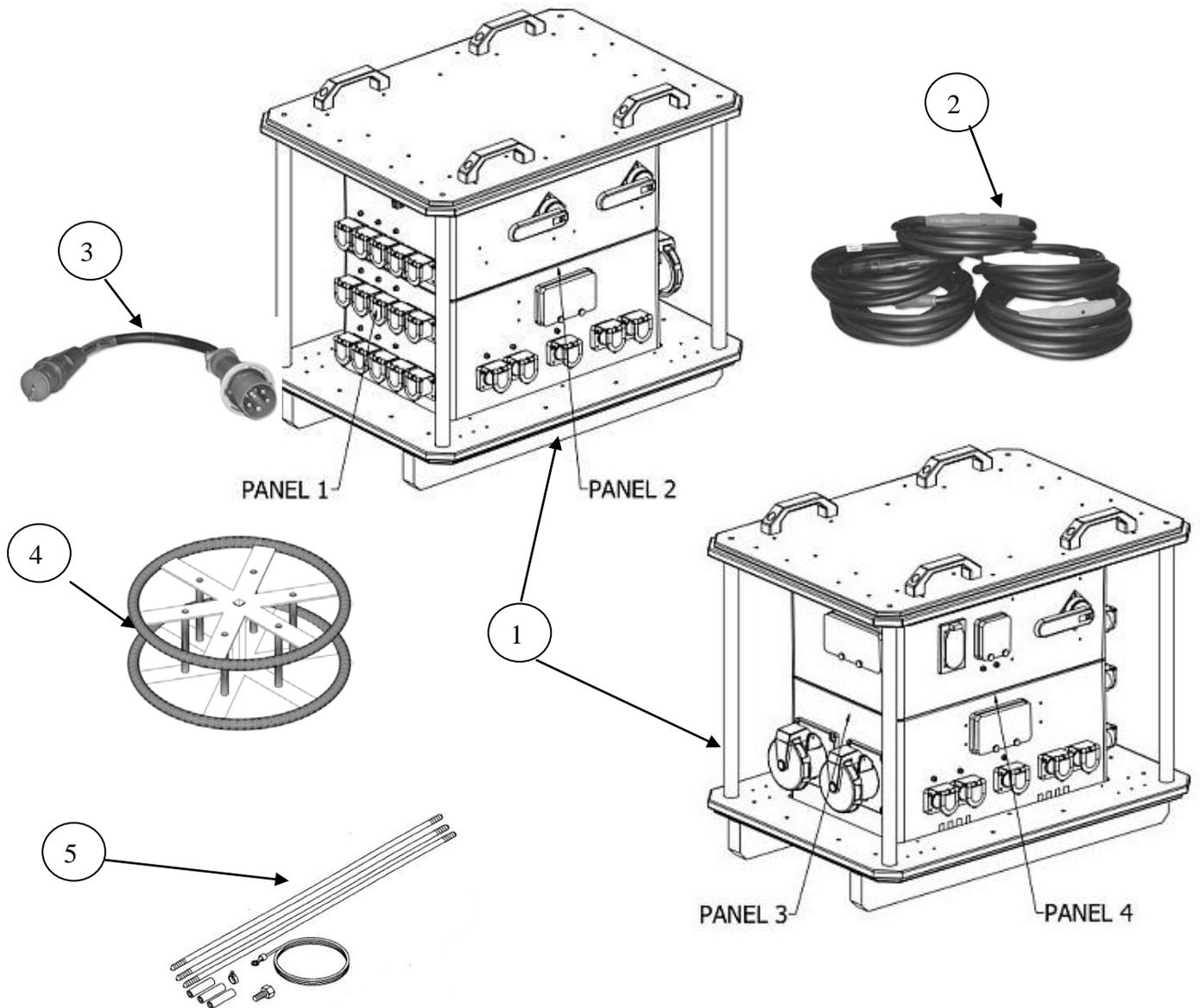


FIGURE B- 22 300kW PDB Configuration

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APPENDIX R



FIND NO.	COMPONENT	QTY
1	MEPDIS-R 300 kW PDB	1
2	Cable Assembly, Power, Electrical: 25 ft, 400A, feeder cable, set #6, (5) cables per set;	4
3	Cable Assembly, Power, Electrical: 3 Ft, 100a, Adapter Cable, Set #8, 100kw	1
4	Reel, Cable, Small: 11 in. wide, O.D. 30 in.	4
5	Rod, Ground: stl; 3 sect; 0.625-11 IA in. UNC thd; 6 AWG; 72 in. ground wire; 0.625 in. dia. 108.000 in. oa lg	1

FIGURE B- 23 MEPDIS-R 300kW PDB Components

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2.2.1.13 Assembly 30208. The Navy supported 150kW, 15kVA, Power Distribution Panel Unit is used to provide a network of multiple 480 volt, 225 to 100 amps, 3 phase loads, 208Y/120 volt, 100 amps, 3 and 1 phase loads and the power source is supplied from a remote generator or facility power. The system is capable of one 480 volts, 225 amp power input and five 480 volt power outputs; one power outlet to a 15 kW transformer and twenty 208Y/120 volt power outputs. An alternate power input is available for 208Y/120 volt assembly using 208Y/120 volt, 100 amp power input and eighteen 208Y/120 volt power outputs. The alternate power source will be used when 480 volt power source is not available or the transformer is inoperative. The 150 kW, 15 kVA is used in conjunction with various ground support equipment.

Identification Data		
MODEL	LOM-150 kW-15	
DESCRIPTION	Input	Output
	Circuit Breaker Protection One 480 volts, 3 phases, 225 amps Alternate: One 208Y/120 volts, 3 phase, 100 amps	Five 480 volts, 3 phase, one power outlet to a 15kVA transformer and twenty 208Y/120 volts
CIRCUIT BREAKERS	480 Volt Circuits and 20Y/120 Volt	
NSN	Part No	COG
6110-00-186-2542	N29183/4A	2CA
Physical Characteristics		
DIMENSION: LWD in inches	CUBE (ft³)	WEIGHT (lbs)
43 X 31.5 X 30.5	63.89	1,143.06

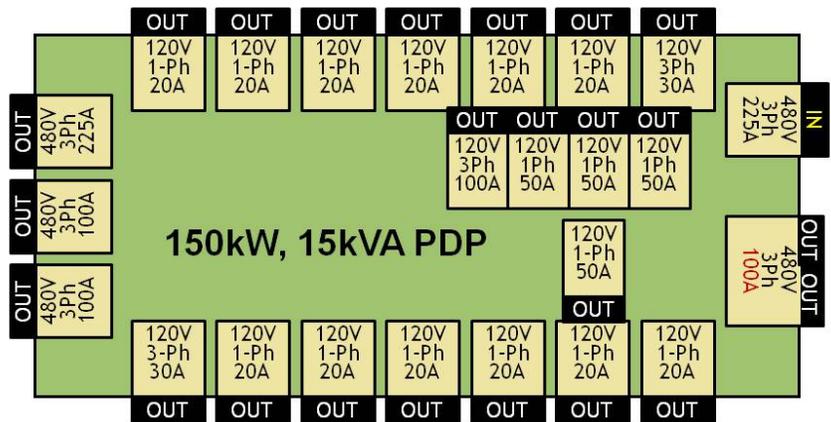
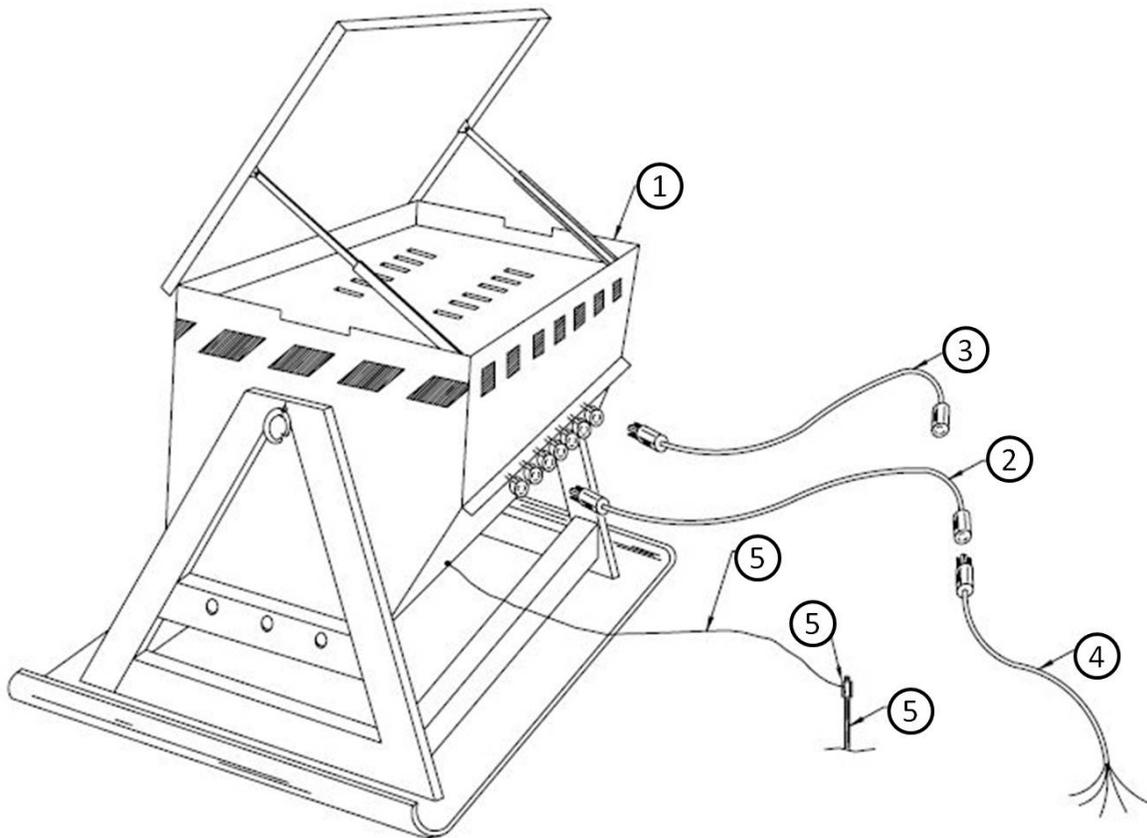


FIGURE B- 24 The 150kW, 15kVA, Power Distribution Panel Configuration

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FIND NO.	COMPONENT	QTY
1	PANEL POWER DISTRIBUTION PANEL 15 kVA TRANSFORMER 480/208/120V	1
2	CABLE ASSEMBLY 10-5 SO 50FT NEMA L21-30P L21-30R	4
3	CABLE ASSEMBLY 10-3 SO 50FT NEMA L5-20P L5-20R	14
4	CABLE ASSEMBLY 10-5 SO 15FT NEMA L21-30P WP	2
5	ROD GROUND 3-3FT SECTIONS 5/8N DIA STEEL CLAD	1

FIGURE B- 25 Assembly 30208 Components

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APPENDIX B**

2.2.1.14 Assembly 30209. The Navy supported 150kW, 30kVA Power Distribution Panel unit is used to provide a network of multiple 480 volt, 225 to 100 AMPS, 3-phase loads, 208Y/120 volt , 100 to 20 AMPS, 3 and 1 phase loads and the power source is supplied from a remote generator or facility power. The system is capable of one 480 volt, 225 amp power input and 5 (480 volt) power outputs; one power outlet to a 30KVA transformer and 16 (208Y/120 volt) power outputs. An alternate power input is available for 208Y/120 volt assembly using 208Y/120 volt, 100 AMP power input and 15 (208Y/120 volt) power outputs. The alternate power source will be used when 480 volt power source is not available or the transformer is inoperative. The 150 kW, 30 kVA is used in conjunction with various ground support equipment.

Identification Data		
MODEL	LOM-120kW	
DESCRIPTION	Input	Output
	One 480 volts, 3 phase, 225 amps Alternate: 1 208Y/120 volts, 3 phase, 100 amps	One 480 volts, 3 phase, 225amps Four 480 volts, 3 phase, 100amps One 480 volts, 3 phase, 40 or ; Two 208Y/120 volts, 3 phase, 100 amps Two 208Y/120 volts, 1 phase, 50 amps Eight 208Y/120 volts, 1 phase, 20 amps (GFCI) Four 208Y/120 volts, 3 phase, 30 amps
CIRCUIT BREAKERS		
NSN	Part No	COG
6110-00-186-2537		2CA
Physical Characteristics		
DIMENSION: LWD in inches	CUBE (ft³)	WEIGHT (lbs)
40.25 X 32 X 30.5	63.31	1415.06

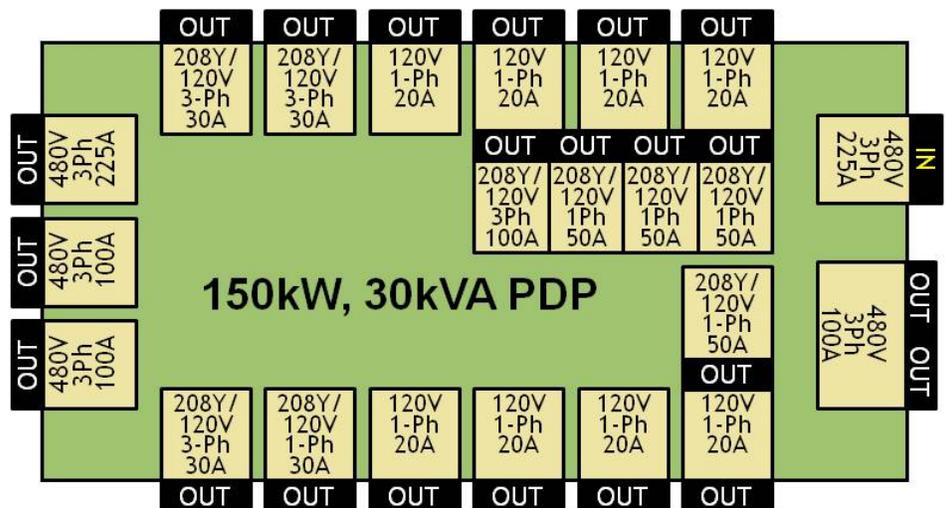
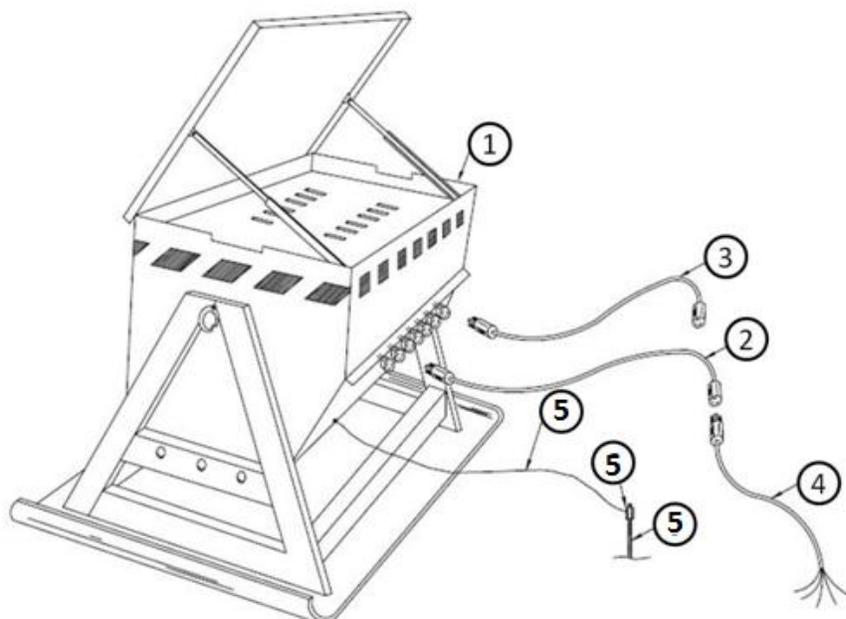


FIGURE B- 26 150KW, 30KVA Power Distribution Panel

**MIL-STD-633F
APPENDIX B**



FIND NO.	COMPONENT	QTY
1	PANEL POWER DIST PORT 150KW 30KVA TRANSFORMER	1
2	CABLE ASSEMBLY 10-5 SO 50FT NEMA L21-30P L21-30R	8
3	CABLE ASSEMBLY 10-3 SO 50FT NEMA L5-20P L5-20R	8
4	CABLE ASSEMBLY 10-5 SO 10FT NEMA L21-30P L21-30P WP	4
5	ROD GROUND 3-3FT SECTIONS 5/8N DIA STEEL CLAD	1

FIGURE B- 27 Assembly 30209 Components

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APPENDIX B**

2.2.1.15 Assembly 30030. The Navy supported PDU is a lightweight, portable and free-standing power distribution unit capable of distributing single and 3-phase power. The PDU consists of a box and frame assembly, a circuit assembly, one 200 Amp 3-phase input connector, four side panels with receptacles and input power indicator lights. Packaged as a kit, the unit comes with a set of bare end tails provided for connection between power source and the power distribution box.

Identification Data		
MODEL	DB200MP-PQ66S3	
DESCRIPTION	Input	Output
	3 phase 200A 208Y/120V Single Pole CAM Type 16 Series, 5-Wire	One 1 phase 20A 120V GFCI Straight Blade Duplex Two 3 phase 60A 208Y/120V Commercially Equivalent MIL Class L Two 3 phase 100A 208Y/120V Commercially Equivalent MIL Class L Two 3 phase 60A 208Y/120V Commercially Equivalent MIL Class L
CIRCUIT BREAKERS		
NSN	Part No	COG
6110-01-554-7406		9ED
Physical Characteristics		
DIMENSION: LWD in inches	CUBE (ft³)	WEIGHT (lbs)
36 X 26 X 18.5	10.29	185

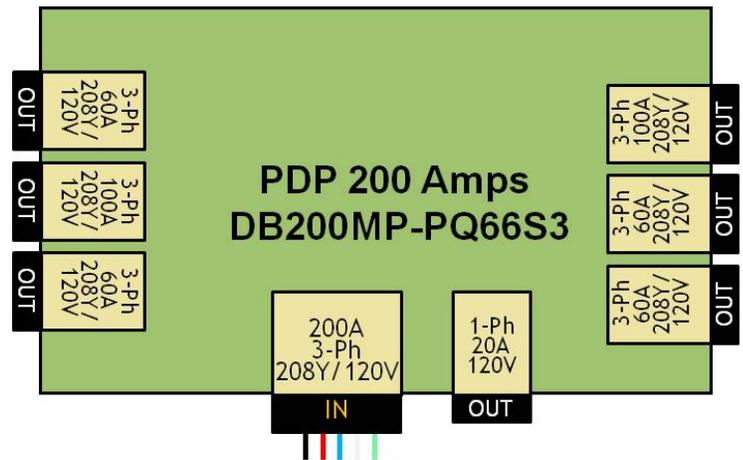
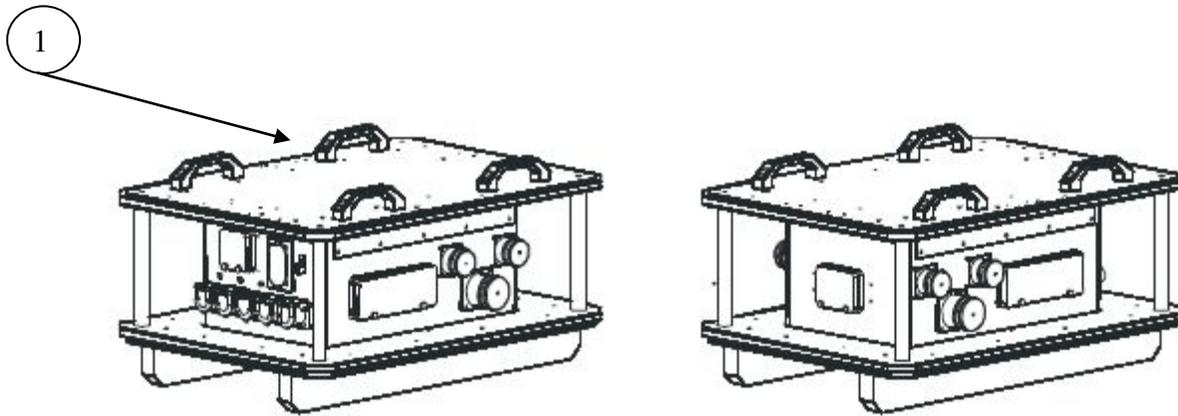


FIGURE B- 28 200 Amps Power Distribution Unit

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APPENDIX B**



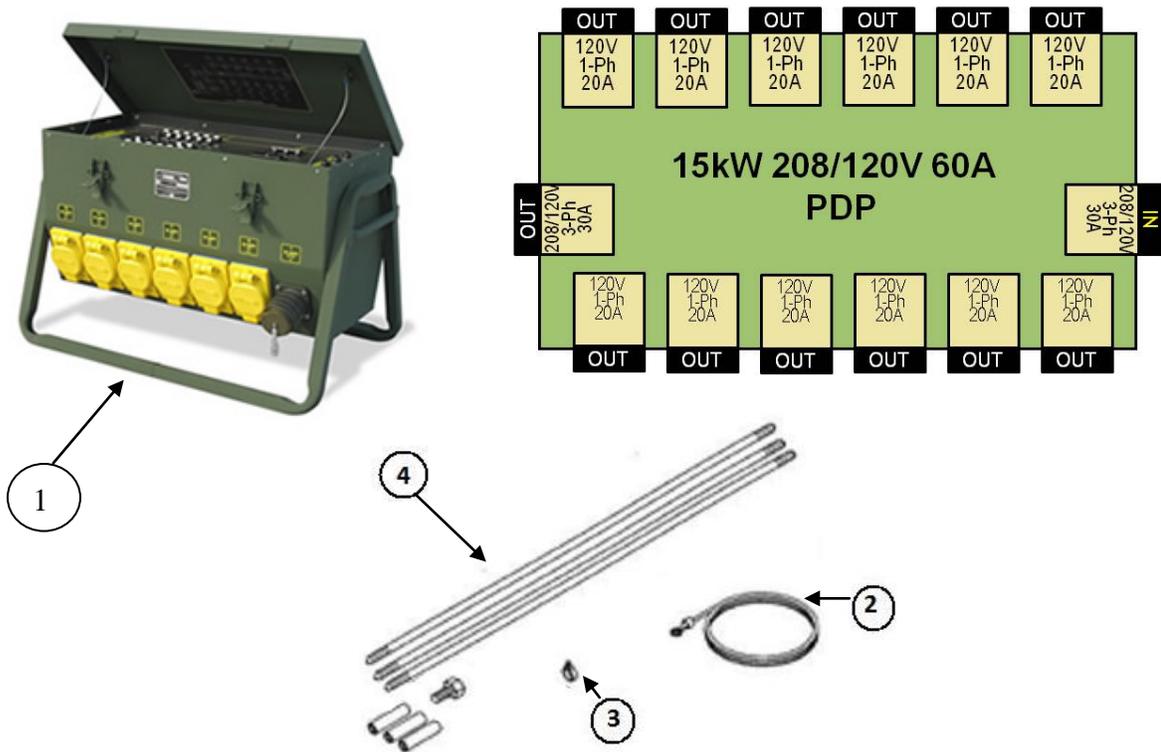
FIND NO.	COMPONENT	QTY
1	PANEL POWER DISTRIBUTION 200 AMP LEX	1

FIGURE B- 29 Assembly 30030 Components

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APPENDIX B**

2.2.1.16 Assembly 30133. The Navy supported Distribution Center Portable 208Y/120V 60 Amp (15KW) PDP is designed to accept power at 120/208 VAC, 3-phase, utilizing 60-amp Power connectors. Power is then distributed at 120/208 VAC 3-phase and 120 VAC 1-phase. The PDPs are used to provide power to equipment requiring 120/208 VAC electrical power.

Identification Data		
MODEL	LOM-010KW	
DESCRIPTION	Input	Output
	One 208Y/120 volts, 3 phase, 60 amps	One 208Y/120 volts, 3 phase, 60 amps Twelve 120volts, 1 phase, 20 amps
CIRCUIT BREAKERS		
NSN	Part No	COG
6110-01-236-3829	PDS-PDP-15	
Physical Characteristics		
DIMENSION: LWD in inches	CUBE (ft³)	WEIGHT (lbs)
29 X 18 X 18	7.12	132.04



FIND NO.	COMPONENT	QTY
1	PANEL POWER DIST 208/120V 60A (15kW) GFCI	1
2	CONNECTOR PLUG ELECTRICAL 60A 3PH	8
3	CLAMP GND ROD ADJ	1
4	ROD GROUND 3-3FT SECTIONS 5/8N DIA STEEL CLAD	1

FIGURE B- 30 Distribution Center Portable 208Y/120V 60 Amp (15kW)

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APPENDIX B**

2.2.1.17 Assembly 30211. The Navy supported 10 kW portable power distribution panel unit is used to provide a network .of multiple 120/208-volt, 3-phase loads and 120-volt, 1-phase loads from a remote generator or facility power. The system is capable of 1 separate power input and 7 power outputs. The 10 kW is used in conjunction with various ground support equipment.

Identification Data		
MODEL	LOM-010KW	
DESCRIPTION	Input	Output
	One 208Y/120 volts, 3 phase, 30 amps	One 208Y/120 volts, 3 phase, 30 amps Four 120volts, 1 phase, 20 amps (GFCI) Two 208Y/120 volts, 3 phase, 20 amps One 208Y/120 volts, 3 phase, 30 amps
CIRCUIT BREAKERS		
NSN	Part No	COG
6110-00-205-1637		2CA
Physical Characteristics		
DIMENSION: LWD in inches	CUBE (ft³)	WEIGHT (lbs)
16.4 X 16 X 16	20.45	287

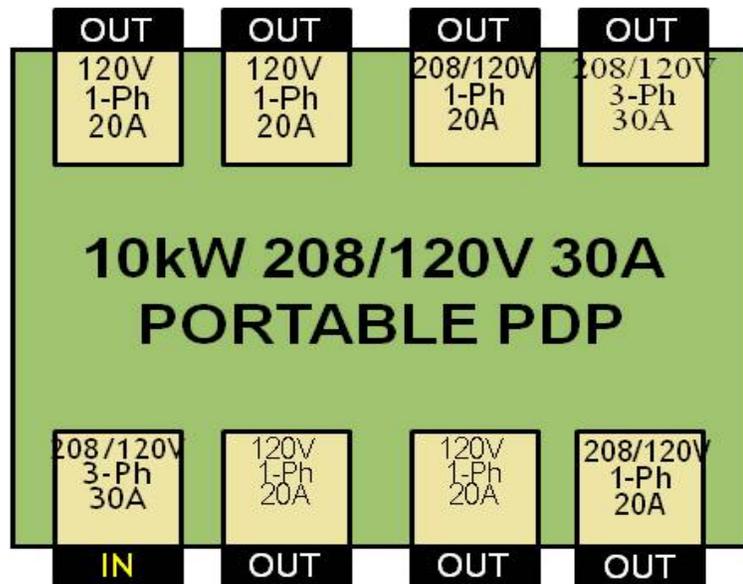
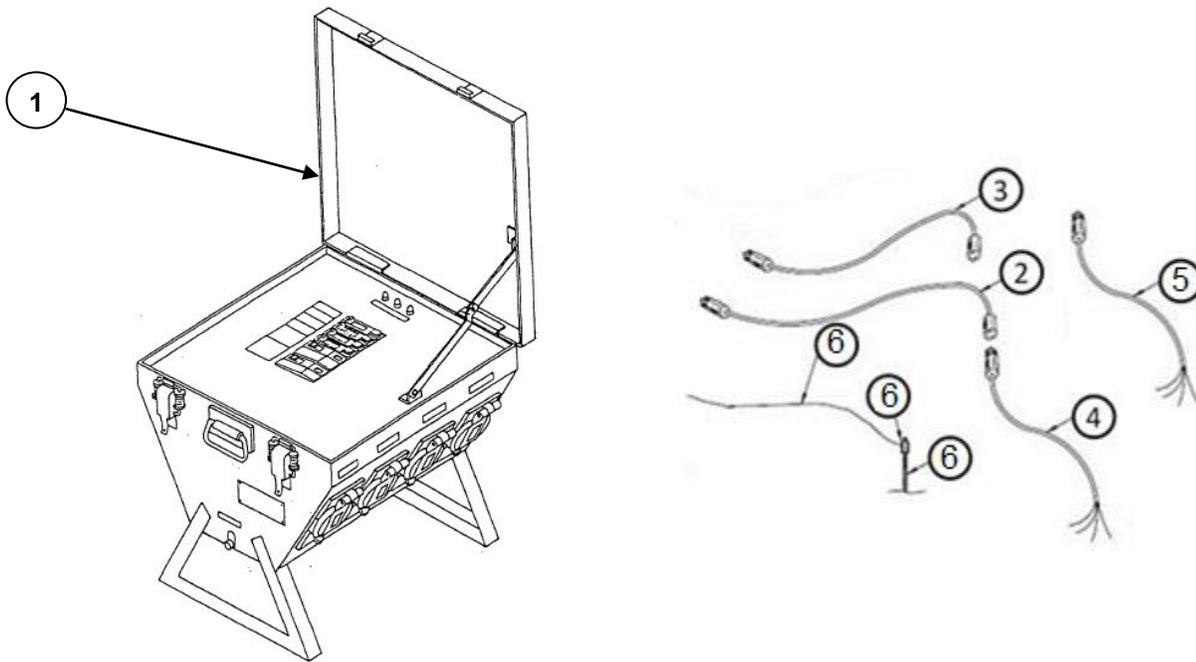


FIGURE B- 31 10KW, 208/120V 30A Portable Power Distribution Panel

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APPENDIX B



FIND NO.	COMPONENT	QTY
1	PANEL POWER DIST 208Y/120V 60A (10KW) GFCI	1
2	CABLE ASSEMBLY 10-5 SO 50FT NEMA L21-30P L21-30R	2
3	CABLE ASSEMBLY 10-3 SO 2FT NEMA L5-20P 2EA 5-15R	4
4	CABLE ASSEMBLY 10-4 SO 50FT NEMA L14-20P L14-20R	4
5	CABLE ASSEMBLY 10-4 SO 15FT NEMA L14-20P WP	2
6	ROD GROUND 3-3FT SECTIONS 5/8N DIA STEEL CLAD	1

FIGURE B- 32 Assembly 30211 Components

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APPENDIX B**

2.2.1.18 Assembly 32600. The Navy supported 120kW Power Distribution Panel unit is used to provide a network of multiple 480 volt, 100 to 20 AMPS, 3 and 1-phase loads, or 208 volt, 100 to 20 AMPS, 3 and 1 phase loads and the power source is supplied from a remote generator or facility power. The system is capable of one to four 480 volt or 208 volt, 100 amp power input and 8 (480 volt or 208 volt) , or 2 (277 or 120 volt) power outputs. The 120 kW is used in conjunction with various ground support equipment.

Identification Data		
MODEL	LOM-120kW	
DESCRIPTION	Input	Output
	Circuit Breaker Protection Four 480 volts, 3 phases, 100 amps or Four 208 volts, 3 phase, 100 amps	Two 480 or 208 volts, 3 phase, 100 amps Four 480 or 208 volts, 3 phase, 50 amps Two 480 or 208 volts, 3 phase, 30 amps Two 277 or 120 volts, 1 phase, 20 amps
CIRCUIT BREAKERS		
NSN	Part No	COG
6110-00-186-6623	M29183/7A	2CA
Physical Characteristics		
DIMENSION: LWD in inches	CUBE (ft³)	WEIGHT (lbs)
25.62 X 27.75 X 33.5	23.93	887.8

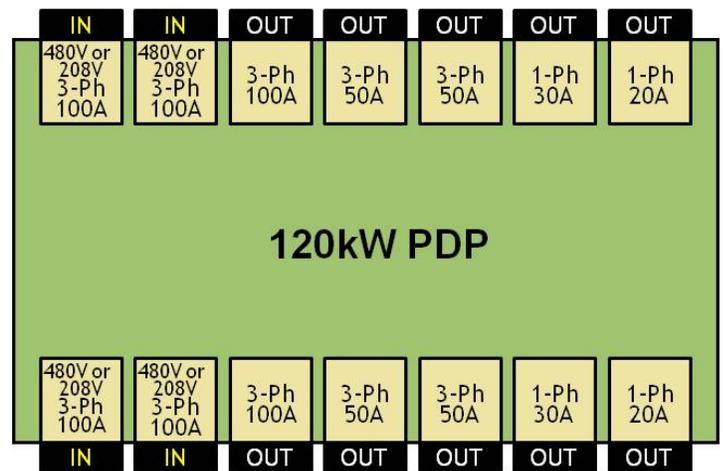
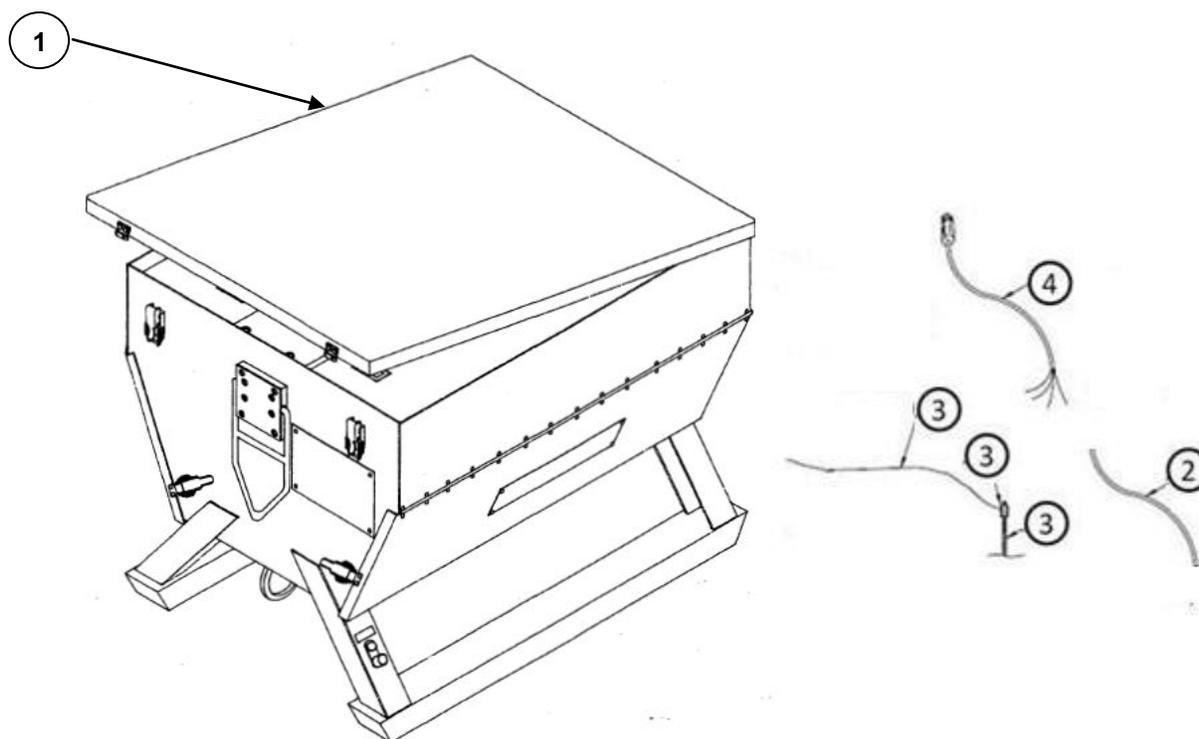


FIGURE B- 33 120kW Power Distribution Panel

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APPENDIX B**



FIND NO.	COMPONENT	QTY
1	PANELBOARD WP 480V 3P4W 400A	1
2	WIRE ELEC 4/0 AWG EXPED	600 Ft
3	ROD GROUND 3-3FT SECTIONS 5/8N DIA STEEL CLAD	1
4	BOX CONN ELECTRIC 2 SCREW 2N F/PORTABLE CABLE	4

FIGURE B- 34 Assembly 32600 Components

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APPENDIX B**

2.2.1.19 PPD Box 200 Amp (60kW). The Navy supported 60 kW PDP is designed to accept power at 120/208 VAC, 3-phase, utilizing 60 amp Power connectors. Power is then distributed at 120/208 VAC 3-phase and 120 VAC 1-phase. The PDPs are used to provide power to equipment requiring 120/208 VAC electrical power.

Identification Data		
MODEL	LOM-010KW	
DESCRIPTION	Input	Output
	One 208Y/120 volts, 3 phase, 60 amps	One 208Y/120 volts, 3 phase, 60 amps Four 120 volts, 1 phase, 20 amps One 120 volts, 1 phase, 15 amp
CIRCUIT BREAKERS	Thermal magnetic type	
NSN	Part No	COG
6110-01-236-4637	PDSYS-PDP-60	
Physical Characteristics		
DIMENSION: LWD in inches	CUBE (ft³)	WEIGHT (lbs)
23 x 18 x 18	25.93	200

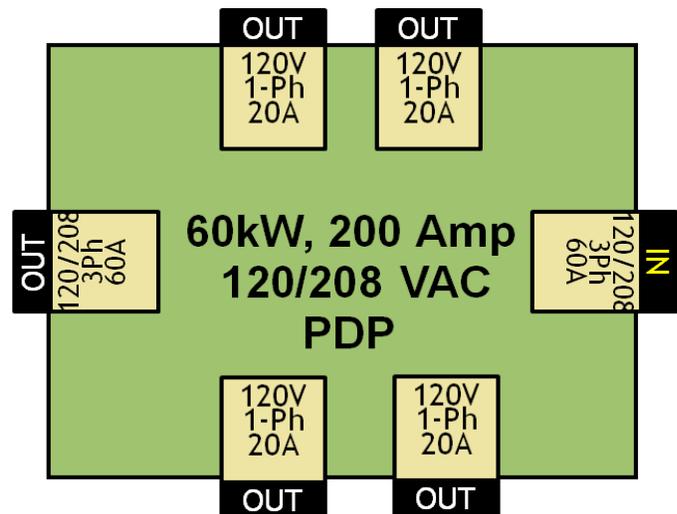
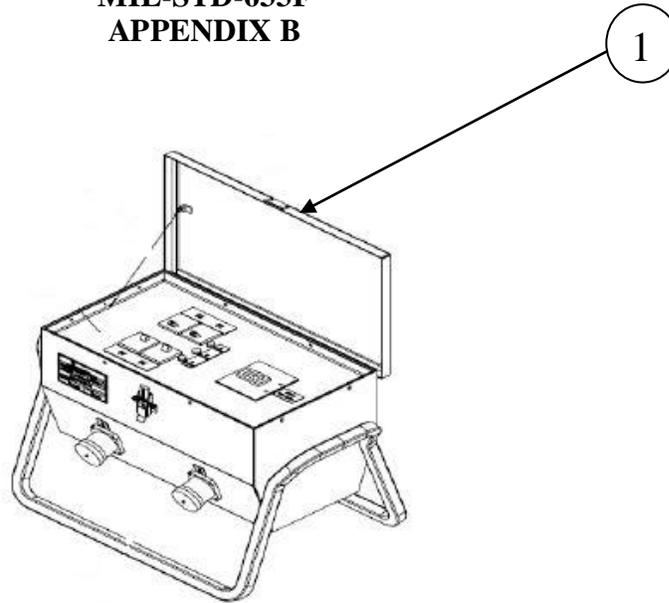


FIGURE B- 35 Distribution Center Portable 208Y/120V 200 Amp (60kW)

**MIL-STD-633F
APPENDIX B**FIGURE B- 36 Panel Power Distr 60 kW Components

FIND NO.	COMPONENT	QTY
1	PANEL POWER DISTRIBUTION 60KW 200 AMPS 60 HZ 240Y/208V, 3 PHASE, FOR PD86MMIK8605	1

MIL-HDBK-633A
APPENDIX C

**LEGACY MEPGS AND ASSOCIATED POWER UNITS AND POWER PLANTS
NO LONGER PROCURABLE**

C.1 SCOPE

C.1.1 Scope. This Appendix identifies various legacy MEPGS and associated equipment that are no longer procurable, see [table C-I](#) below. Data contained in this Appendix is for historical reference.

TABLE C-I Guide to the Characteristic Data

SIZE	FREQ	ITEM DESCRIPTION	MODEL NO.	NSN	FIGURE	PAGE	
0.5 kW	400 Hz	Mil-Std, GED, Tactical, Utility	MEP-019A	6115-00-940-7862	FIGURE C-1	118	
1.5 kW	60 Hz	Mil-Std, GED, Tactical, Utility	MEP-015A	6115-00-889-1446	FIGURE C-2	120	
	28 VDC	Mil-Std, GED, Tactical, Utility	MEP-025A	6115-00-017-8236	FIGURE C-2	120	
3 kW	60 Hz	TQG, Power Plant	AN/MJQ-42	6115-01-322-8583	FIGURE C-3	121	
		TQG, Power Plant	AN/MJQ-43	6115-01-322-8582	FIGURE C-4	122	
	400 Hz	Mil-Std, GED, Tactical, Utility	MEP-021A	6115-00-017-8238	FIGURE C-5	124	
		Mil-Std, GED, Tactical, Utility, mod.	MEP-021C	6115-01-175-7321	FIGURE C-5	124	
	28 VDC	Mil-Std, GED, Tactical, Utility	MEP-026A	6115-00-017-8239	FIGURE C-5	124	
		Mil-Std, GED, Tactical, Utility, mod.	MEP-026C	6115-01-175-7320	FIGURE C-5	124	
	60 Hz	Mil-Std, DED, Tactical, Utility, w/o ASK	MEP-016B	6115-01-150-4140	FIGURE C-6	126	
		Mil-Std, DED, with ASK	MEP-701A	6115-01-234-5966	FIGURE C-6	126	
		Mil-Std, Power Plant, DED	AN/MJQ-32	6115-01-280-2300	FIGURE C-7	127	
		Mil-Std, Power Plant, DED	AN/MJQ-33	6115-01-280-2301	FIGURE C-8	128	
5 kW	60 Hz	TQG, Power Unit	PU-797	6115-01-332-0741	FIGURE C-9	129	
		TQG, Power Plant	AN/MJQ-35	6115-01-313-4216	FIGURE C-10	130	
	60 Hz	Mil-Std, GED, Tactical, Utility	MEP-017A	6115-00-017-8240	FIGURE C-11	132	
	400 Hz	Mil-Std, GED, Tactical, Utility	MEP-022A	6115-00-017-8241	FIGURE C-11	132	
	60 Hz	Mil-Std, DED, Tactical, Utility	MEP-002A	6115-00-465-1044	FIGURE C-12	134	
		Mil-Std, Power Unit, DED	PU-751/M	6115-00-033-1373	FIGURE C-13	135	
	28VDC	Mil-Std, Power Plant, DED	AN/MJQ-16	6115-00-033-1395	FIGURE C-14	136	
		APU, DED	MEP-952	6115-01-317-2139	FIGURE C-15	138	
	10 kW	60 Hz	TQG, Power Unit	PU-798	6115-01-319-9032	FIGURE C-16	139
		400 Hz	TQG, Power Unit	PU-799	6115-01-313-4283	FIGURE C-17	140
60 Hz		Mil-Std, DED, Tactical, Utility	MEP-003A	6115-00-465-1030	FIGURE C-18	142	
400 Hz		Mil-Std, DED, Tactical, Utility	MEP-112A	6115-00-465-1027	FIGURE C-18	142	
60 Hz		Mil-Std, Power Unit, DED	PU-753/M	6115-00-033-1389	FIGURE C-19	143	
		Mil-Std, Power Plant, DED	AN/MJQ-18	6115-00-033-1398	FIGURE C-20	144	
400 Hz		Mil-Std, Power Plant, DED	AN/MJQ-25	6115-01-153-7742	FIGURE C-21	145	
60 Hz		Mil-Std, GED, Tactical, Utility	MEP-018A	6115-00-889-1447	FIGURE C-22	147	
400 Hz		Mil-Std, GED, Tactical, Utility	MEP-023A	6115-00-926-0843	FIGURE C-22	147	
60 Hz		APU, DED	MEP-903A	6115-01-431-3062	FIGURE C-23	149	
15 kW	50/60 Hz	TQG, DED	MEP-804A	6115-01-274-7388	FIGURE C-24	151	
	400 Hz	TQG, DED, Skid Mounted	MEP-814A	6115-01-274-7393	FIGURE C-24	151	
		TQG, Power Unit	PU-800	6115-01-317-2137	FIGURE C-25	152	

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TABLE C-I Guide to the Characteristic Data- Continued.

SIZE	FREQ	ITEM DESCRIPTION	MODEL NO.	NSN	FIGURE	PAGE
15 kW	50/60 Hz	TQG, Power Unit	PU-801	6115-01-319-9033	FIGURE C-26	153
		TQG, Power Unit	PU-801A	6115-01-413-3821	FIGURE C-27	154
		TQG, Power Unit	PU-802	6115-01-317-2138	FIGURE C-28	155
	400 Hz	TQG, Power Plant	AN/MJQ-39	6115-01-299-6034	FIGURE C-29	156
	50/60 Hz	TQG, Power Plant	AN/MJQ-48	6115-01-540-8433	FIGURE C-30	157
		TQG, Power Plant	AN/MJQ-48A	6115-01-540-9465	FIGURE C-31	158
		Mil-Std, DED, Tactical, Utility	MEP-004A	6115-00-118-1241	FIGURE C-32	160
	400 Hz	Mil-Std, DED, Tactical, Precise	MEP-113A	6115-00-118-1244	FIGURE C-32	160
	50/60 Hz	Mil-Std, Power Unit, DED	PU-405A/M	6115-00-394-9577	FIGURE C-33	161
	400 Hz	Mil-Std, Power Unit, DED	PU-732/M	6115-00-260-3082	FIGURE C-34	162
Mil-Std, Power Plant, DED		AN/MJQ-15	6115-00-400-7591	FIGURE C-35	163	
30 kW	50/60 Hz	TQG, Gen Set, DED	MEP-805A	6115-01-274-7389	FIGURE C-36	165
	400 Hz	TQG, Gen Set, DED	MEP-815A	6115-01-274-7394	FIGURE C-36	165
	50/60 Hz	TQG, Power Unit, DED	PU-803	6115-01-317-2136	FIGURE C-37	166
	400 Hz	TQG, Power Unit, DED	PU-804	6115-01-317-2135	FIGURE C-38	167
	50/60 Hz	TQG, Power Plant, DED	AN/MJQ-40	6115-01-299-6033	FIGURE C-39	168
		Mil-Std, DED, Tactical, Precise	MEP-104A	6115-00-118-1247	FIGURE C-40	170
		Mil-Std, DED, Tactical, Precise	MEP-005A	6115-00-118-1240	FIGURE C-41	172
	400 Hz	Mil-Std, DED, Tactical, Precise	MEP-114A	6115-00-118-1248	FIGURE C-41	172
	50/60 Hz	Mil-Std, Power Unit, DED	PU-406B/M	6115-00-394-9576	FIGURE C-42	173
	400 Hz	Mil-Std, Power Unit, DED	PU-760/M	6115-00-394-9581	FIGURE C-43	174
	50/60 Hz	Mil-Std, Power Plant, DED	AN/MJQ-10A	6115-00-394-9582	FIGURE C-44	175
	60 kW	50/60 Hz	TQG, Gen Set, DED	MEP-806A	6115-01-274-7390	FIGURE C-45
400 Hz		TQG, Gen Set, DED	MEP-816A	6115-01-274-7395	FIGURE C-45	177
50/60 Hz		TQG, Power Unit, DED	PU-805	6115-01-317-2134	FIGURE C-46	178
400 Hz		TQG, Power Unit, DED	PU-806	6115-01-317-2133	FIGURE C-47	179
50/60 Hz		TQG, Power Plant, DED	AN/MJQ-41	6115-01-303-7896	FIGURE C-48	180
400 Hz		TQG, Power Plant, DED	AN/MJQ-1612	6115-01-349-1536	FIGURE C-49	181
50/60 Hz		TQG, Power Plant, DED	AN/MJQ-1610		FIGURE C-50	182
		Mil-Std, DED, Tactical, Precise	MEP-105A	6115-00-118-1252	FIGURE C-51	184
		Mil-Std, DED, Tactical, Utility	MEP-006A	6115-00-118-1243	FIGURE C-52	186
400 Hz		Mil-Std, DED, Tactical, Precise	MEP-115A	6115-00-118-1253	FIGURE C-52	186
50/60 Hz		Mil-Std, Power Unit, DED	PU-650B/G	6115-00-258-1622	FIGURE C-53	187
400 Hz		Mil-Std, Power Unit, DED	PU-707A/M	6115-00-394-9573	FIGURE C-54	188
50/60 Hz	Mil-Std, Power Plant, DED	AN/MJQ-12A	6115-00-257-1602	FIGURE C-55	189	
100 kW	50/60 Hz	Mil-Std, Gen set, DED, Tactical, Utility	MEP-007A	6115-01-133-9101	FIGURE C-56	191
		Mil-Std, DED, Tactical, Utility	MEP-007B	6115-01-036-6374	FIGURE C-57	193
		Mil-Std, DED, Power Unit	PU-495B/G	6115-01-134-0165	FIGURE C-58	194
200 kW	50/60 Hz	Mil-Std, DED, Tactical, Utility	MEP-009A	6115-00-133-9104	FIGURE C-59	196
		Mil-Std, DED, Tactical, Precise	MEP-108A	6115-00-935-8729	FIGURE C-59	196
		Mil-Std, Power Plant, DED	AN/MJQ-11	6115-00-134-8485	FIGURE C-60	197
		Mil-Std, DED, Tactical, Utility	MEP-009B	6115-01-021-4096	FIGURE C-61	199
		Mil-Std, Power Plant, DED	AN/MJQ-11A	6115-00-394-9583	FIGURE C-62	200
500 kW	50/60 Hz	Mil-Std, DED, Tactical, Utility	MEP-029A	6115-01-030-6085	FIGURE C-63	202
750 kW	50/60 Hz	Mil-Std, Power Unit, DED	MEP-012A	6115-01-143-3850	FIGURE C-64	204
		Mil-Std, Power Unit, DED	MEP-208A	6115-00-450-5881	FIGURE C-65	206
		DPGDS, Power Unit	MEP-810A	6115-01-486-4033	FIGURE C-66	208

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TABLE C-I Guide to the Characteristic Data- Continued.

SIZE	FREQ	ITEM DESCRIPTION	MODEL NO.	NSN	FIGURE	PAGE
AGSU		10kW, 28VDC,GTED	MEP-362A	6115-01-161-3992	FIGURE C-67	210
		60kW, 400Hz, 2kW, 28VDC; GTED, PU	MEP-356A	6115-00-420-8486	FIGURE C-68	212
		72kW, 400Hz, 21kW, 28VDC; DED	MEP-357A	6115-00-110-1859	FIGURE C-69	214
DISE		200 amp/phase Feeder Sys -3 Phase-	M200	6150-01-208-9755	FIGURE C-70	215
		100 amp/phase Feeder Sys -3 Phase-	M100	6150-01-208-9754	FIGURE C-71	216
		40 amp/phase Dist Sys - 3 Phase-	M40	6150-01-208-9753	FIGURE C-72	217
		60 amp Dist Sys - 1 Phase-	M60	6150-01-208-9752	FIGURE C-73	218
		Electrical Kit, Utility Receptacle	M46	6150-01-208-9751	FIGURE C-74	219

C.2 DEFINITIONS

C.2.1 Auxiliary Power Unit (APU). An Auxiliary Power Unit (APU) is a power source consisting of a self-contained engine and generator, including remote controls, capable of producing electrical power when connected to its host's source of fuel and starting power.

C.2.2 Aircraft Ground Support Unit. An Aircraft Ground Support Unit (AGSU) is an aviation ground support generator set used to start and service aircraft.

C.2.3 Distribution Illumination Systems, Electrical (DISE). DISE is a set of man portable, reliable, modular, and quick to assemble standardized electrical distribution system components used with DEPMEDS. The DISE provides power networks which can reduce the number of generator sets needed at a field location.

C.3 DETAILED DESCRIPTIONS

C.3.1 Detailed Descriptions. Detailed descriptions are contained in the Characteristic Data paragraphs from [C.3.1.1](#) to [C.3.1.37](#).

MIL-STD-633FC.3.1.1 Military Standard Generator Set, GED, 0.5 kW, 400 Hz.TABLE C-II Characteristic Data for MEP-019A

Identification Data		
Model	MEP-019A	
Description	Generator Set, GED, Tactical, Utility, 0.5 kW, 400 Hz	
NSN	6115-00-940-7862	
LIN	J43027	
SSN		
Specification	NOT PROCURABLE (MIL-G-52732/2)	
Configuration	Tubular frame skid.	
Physical Characteristics		
Dimensions LWH (in)	19.6 x 17.0 x 17.0	
Ship Cube (ft ³)	3	
Dry Weight (lbs)	85	
Engine	1 cylinder gasoline, 1.5 hp @ 3428 RPM, rope start, air cooled.	
Instrumentation	Voltmeter	
Fuels	Automotive gasoline, emergency - aviation gasoline	
Fuel Tank Capacity (Gal)	1	
Performance Characteristics		
Power Rating	0.5 kW @ 1.0 pf from -25°F to 125°F/MSL, 107°F/5000 ft, 95°F/8000 ft.	
Environmental Capability	Rain, humidity, altitude, sand/dust, transportation, 3 foot drop, vibration, 65°F cold storage, salt spray, fungus. Operable at incline to 15%.	
Protective Devices	None	
Fuel consumption	0.25 gal/hour @ rated load	
Human Factors	MIL STD 1474	
Noise	Man portable. 76 dBA @ 25 feet	
Reliability (MTBF)	250 hr (specified)	
Maintenance Ratio		
Electrical Characteristics		
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary exciter.	
EMI	Suppressed to MIL-STD-461 limits.	
EMP	Not protected	
Motor load		
Voltage Connection	120 V, 400 Hz, 1 phase, 2 wire.	
Voltage adj. Range	114 - 126 V	
Freq. adj. Range	N/A	
Electrical Performance		
Electric Power Quality	Frequency	AC Voltage
Regulation	3%	4%
Voltage modulation		
Short term steady state stability (30 sec)	4% bandwidth	2% bandwidth
Long term steady state stability (4 hr)	4% bandwidth	2% bandwidth
Application of rated load	transient	3% under
	recovery time	4 sec
Rejection of rated load	transient	5% over
	recovery time	6 sec
Max waveform deviation factor		8%
Individual waveform harmonic		5%
DC ripple		

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TABLE C-II Characteristic Data for MEP-019A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Canvas cover	6115-00-990-8770	4	negligible
Spark Arrester kit	2990-01-032-0755		none
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-329-14	TO35C2-3-440-1	TM 81283-14	P-8-611E
TM5-2805-256-14	TO35C2-102-2	SL-4-81283B	
TM5-2805-256-24P	TO35C2-102-4		
LO 5-2805-256-12			



MEP-019A

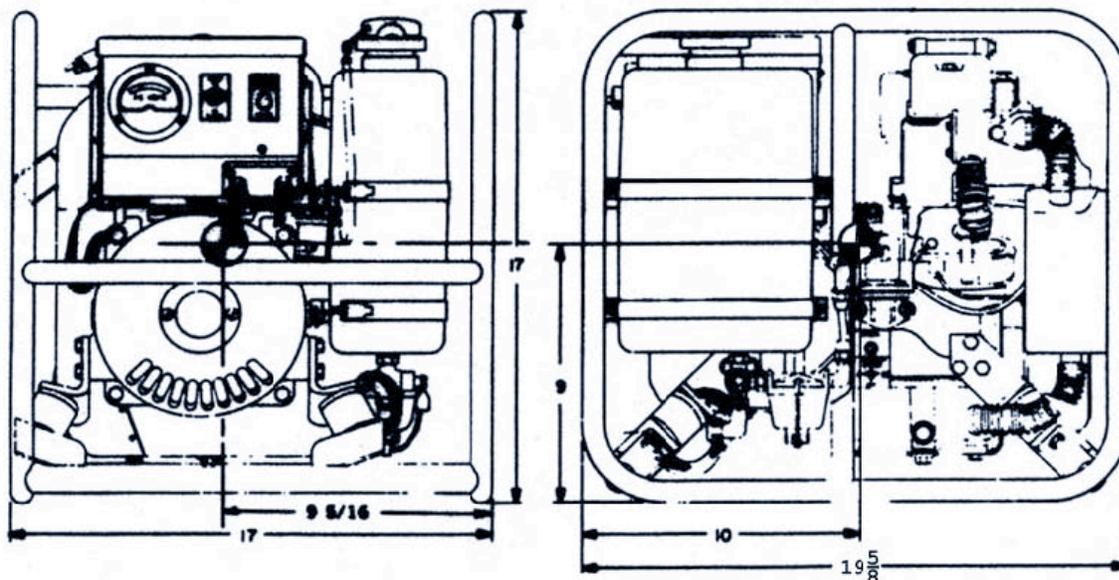


FIGURE C-1 Mil Std Generator Set, GED, 0.5 kW, 400 Hz

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C.3.1.2 Military Standard Generator Set, GED, 1.5 kW.

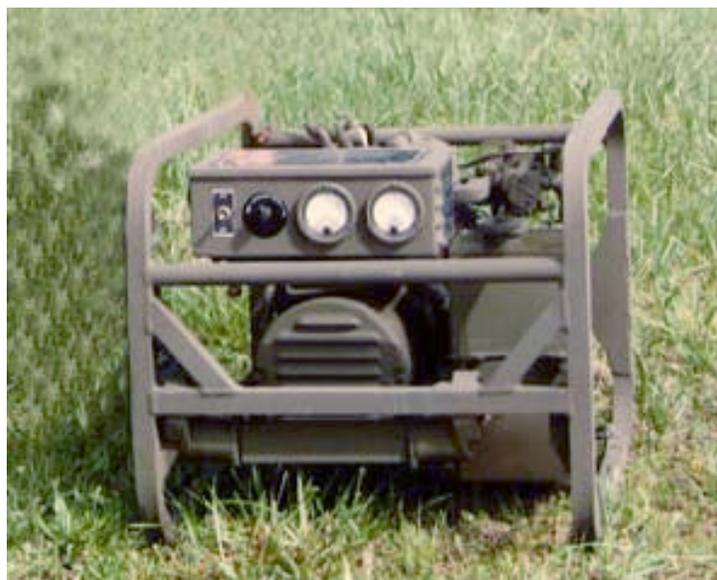
TABLE C-III Characteristic Data for MEP-015A and MEP-025A

Identification Data			
Model	1.5 kW, 60 Hz, GED, Tactical Utility		1.5 kW, 28 VDC, GED, Tactical Utility
Description	MEP-015A		MEP-025A
NSN	6115-00-889-1446		6115-00-017-8236
LIN	J43918		J44056
SSN			
Specification	NOT PROCURABLE (MIL-G-52732/4)		NOT PROCURABLE
Configuration	Tubular frame skid, lifting attachments provided.		
Physical Characteristics			
Dimensions LWH (in)	27.3 x 20.3 x 18.5		
Ship Cube (ft ³)	6		
Dry Weight (lbs)	125		
Engine	2 cylinder gasoline, 3 hp @ 3600 RPM, rope start, air cooled.		
Instrumentation	AC: voltmeter, frequency meter, DC: ammeter, voltmeter.		
Fuels	Automotive gasoline, emergency - aviation gasoline		
Fuel Tank Capacity (Gal)	1.5		
Performance Characteristics			
Power Rating	1.5 kW @ 1.0 pf from -25°F to: 125°F/MSL, 107°F/ 5000 ft, 95°F/8000 ft.		
Environmental Capability	Rain, humidity, altitude, sand/dust, transportation, 3 foot drop, vibration, cold storage: -45°F, salt spray, fungus. Operable at incline to 15%.		
Protective Devices	DC: Overload, short circuit.		
Fuel consumption	0.54 gal/hour @ rated load		
Human Factors	MIL-STD-1474. Man portable.		
Noise	78 dBA @ 25 feet		
Reliability (MTBF)	250 hr (specified)		
Maintenance Ratio			
Electrical Characteristics			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary exciter.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	Not protected		
Motor load			
Voltage Connection	120 V, 1 ph, 2 wire	240 V, 1 ph, 2 wire	28 VDC, 2 wire
Voltage adj. Range	114 - 126 V	228 - 252 V	26.6 - 29.4 V
Freq. adj. Range			
Electrical Performance			
Electric Power Quality	Frequency	AC Voltage	DC Voltage
Regulation	3%		4%
Voltage modulation			
Short term steady state stability (30 sec)	4% bandwidth	2% bandwidth	2% bandwidth
Long term steady state stability (4 hr)	4% bandwidth	2% bandwidth	2% bandwidth
Application of rated load	transient	3% dip	30% dip
	recovery time	4 sec	2 sec
Rejection of rated load	transient	5% rise	30% rise
	recovery time	6 sec	2 sec
Max waveform deviation factor		8%	
Individual waveform harmonic		5%	
DC ripple			5.5%

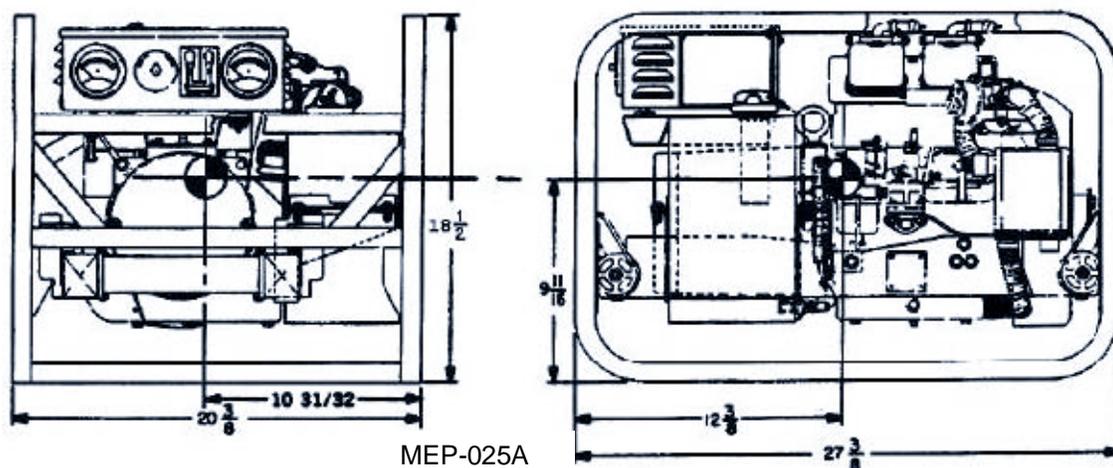
MIL-STD-633F

TABLE C-III Characteristic Data for MEP-015A and MEP-025A - Continued

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Canvas cover	6115-00-941-1655	5	negligible
Spark arrester kit	2990-01-032-0755		none
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-323-14	TO35C2-3-385-1	SL4-07609A/07610A	P-8-612E
TM5-6115-323-15	TO35C2-3-385-11	TM 81283-14	
TM5-6115-323-24P	TO35C2-3-385-4	SL4-81283B	
TM5-2805-257-14	TO38G2-103-2		
TM5-2805-257-24P	TO38G2-103-4		



MEP-015A



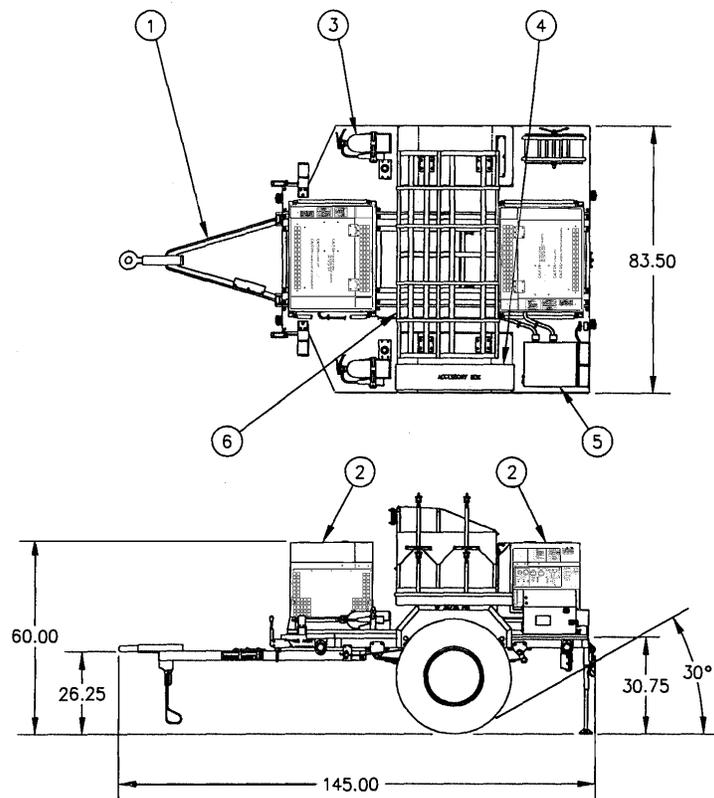
MEP-025A

FIGURE C-2 Mil Std Generator Set, GED, 1.5 kW

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C.3.1.3 TQG, 3kW, 60 Hz Mounted on M116A3 Trailer.

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-42	6115-01-322-8583	P42466	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft³)	Wet Weight (lbs)	Ship Weight (lbs)
145 x 84 x 76	533	2900	2412
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-658-13&P	NOT PROCURABLE (MIL-P-53132/2)	97403-13226E7477	TA-13229E5720

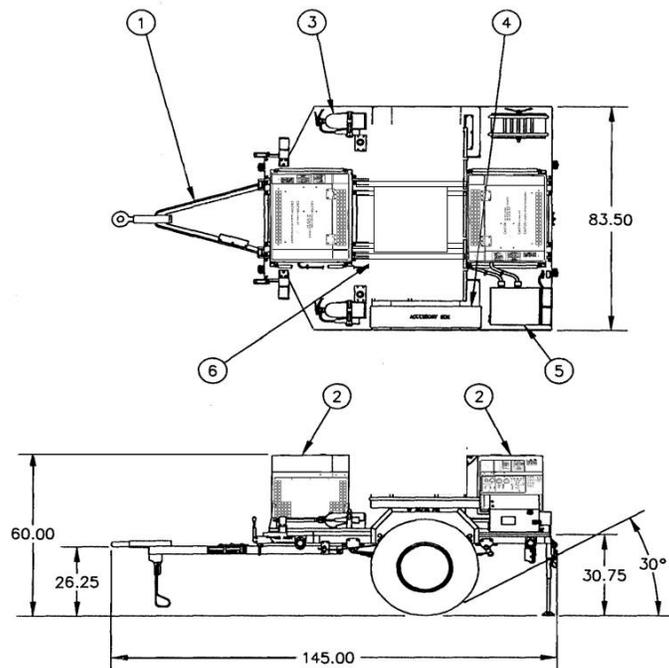


FIND	COMPONENT	QTY	IDENTIFIER
1	Modified 1 ton trailer, M116A3	1	97403-13230E6832
2	MEP-831A	2	6115-01-285-3012
3	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
4	Accessory box	1	97403-13229E7946
5	Switch box	1	97403-13230E6950
6	Rack Assembly (includes cable reel)	1	TBD

FIGURE C-3 PP-AN/MJQ-42 - Tactical Quiet Power Plant 3 kW, 60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-43	6115-01-322-8582	P42534	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 60	421	2212	2187
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-658-13&P	NOT PROCURABLE (MIL-P-53132/1)	97403-13226E7477	TA-13229E5730



FIND	COMPONENT	QTY	IDENTIFIER
1	Modified 1 ton trailer, M116A3	1	97403-13230E6832
2	MEP-831A	2	6115-01-285-3012
3	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
4	Accessory box	1	97403-13229E7946
5	Switch box	1	97403-13230E6950

FIGURE C-4 PP-AN/MJQ-43 - Tactical Quiet Power Plant, 3 kW, 60 Hz

MIL-STD-633FC.3.1.4 Military Standard Generator Set, GED, 3 kW.TABLE C-IV Characteristic Data for MEP-021A, 021C, 026A and 026C

Identification Data				
Model	MEP-021A	MEP-021C	MEP-026A	MEP-026C
Description	3kW,400Hz, GED,TU	3kW,400Hz,GED,TU mod	3 kW, DC,GED,TU	3kW,DC,GED,TU mod
NSN	6115-00-017-8238	6115-01-175-7321	6115-00-017-8237	6115-01-143-3311
LIN	J45836	J45836	J46110	J46110
SSN				
Specification	NOT PROCURABLE			
Configuration	Tubular frame skid, lifting attachments provided.			
Physical Characteristics				
Dimensions LWH (in)	35.0 x 23.8 x 25.0			
Ship Cube (ft ³)	12			
Weight (lbs)	285			
Engine	4 cylinder gasoline, 6 hp @ 3600 RPM, rope start, air cooled.			
Instrumentation	Voltmeter, frequency meter, ammeter, hourmeter.			
Fuels	Automotive gasoline, (emergency - aviation gasoline)			
Fuel Tank Capacity (Gal)	3.6			
Performance Characteristics				
Power Rating	3 kW (400 Hz @0.8 pf) from -25°F (-65°F with Winterization kit) to: 125°F/MSL, 107°F/ 5000 ft, 95°F/8000 ft.			
Environmental Capability	rain, humidity, altitude, sand/dust, 3 foot drop, transportation, vibration, -65°F cold storage, salt spray, fungus. Operable at incline to 15%.			
Protective Devices	Short circuit			
Fuel consumption	0.84 gal/hour @ rated load			
Human Factors	MIL-STD-1474. Man portable.			
Noise	79 dBA @ 25 ft			
Reliability (MTBF)	250 hr specified			
Maintenance Ratio				
Electrical Characteristics				
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary exciter.			
EMI	Suppressed to MIL-STD-461 limits.			
EMP	HAEMP protected.			
Motor load				
Voltage Connection	120/208V, 3ph, 4 wire	120/240V, 1ph, 3 wire	28 VDC, 2 wire	
Voltage adj. Range	197 - 218 V	228 -252 V	26.6 - 29.4 V	
Freq. adj. Range	± 3%			
Electrical Performance				
Electric Power Quality		Frequency	AC Voltage	DC Voltage
Regulation		3%	4% (5% @ 240V)	4%
Voltage modulation				
Short term steady state stability (30 sec)		1% bandwidth	2% bandwidth	
Long term steady state stability (4 hr)		2% bandwidth	2% bandwidth	2% bandwidth
Application of rated load	transient	3% dip	30% dip	30% dip
	recovery time	4 sec	2 sec	2 sec
Rejection of rated load	transient	5% rise	30% rise	40% rise
	recovery time	6 sec	2 sec	2 sec
Max waveform deviation factor			6% -1ph; 5% -3ph	
Individual waveform harmonic			3%	
DC ripple				5.5%

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TABLE C-IV Characteristic Data for MEP-021A, 021C, 026A and 026C – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Spark arrester kit	2990-01-032-7384		none
Canvas cover (winterization kit)	6115-00-941-1655	5	negligible
Torch (winterization kit)	4520-00-710-4341		negligible
Diesel conversion kit	2815-01-440-4426	negligible	none
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-271-14	TO35C2-3-386-1		
TM5-6115-271-15	TO35C2-3-386-4	SL-4-06926A	
TM5-2805-203-14	TO38G2-90-1		
TM5-2805-203-24P	TO38G2-90-14	SL-4-03522B	P-8-613E-24P
LO5-2805-203-12			



MEP-026C (typical DC)

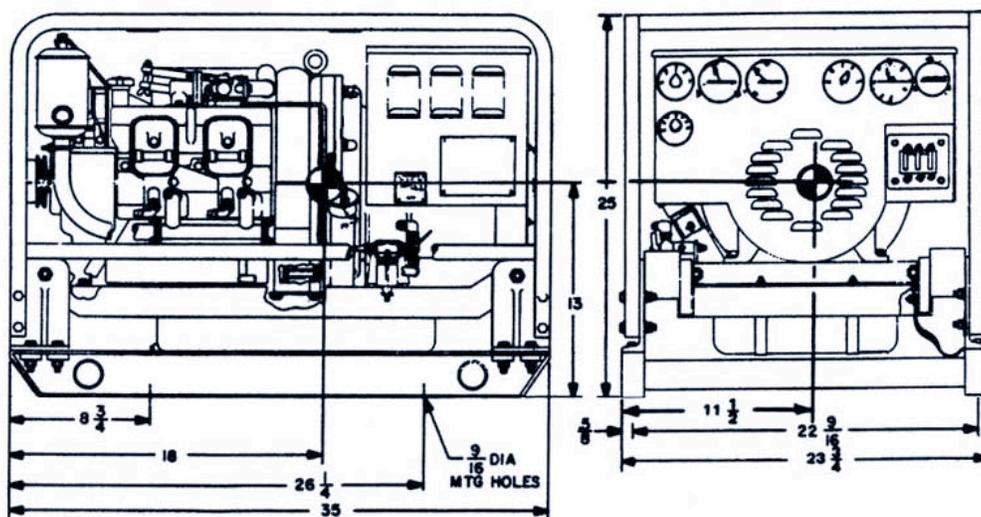


FIGURE C-5 Mil Std Generator Set, GED, 3 kW

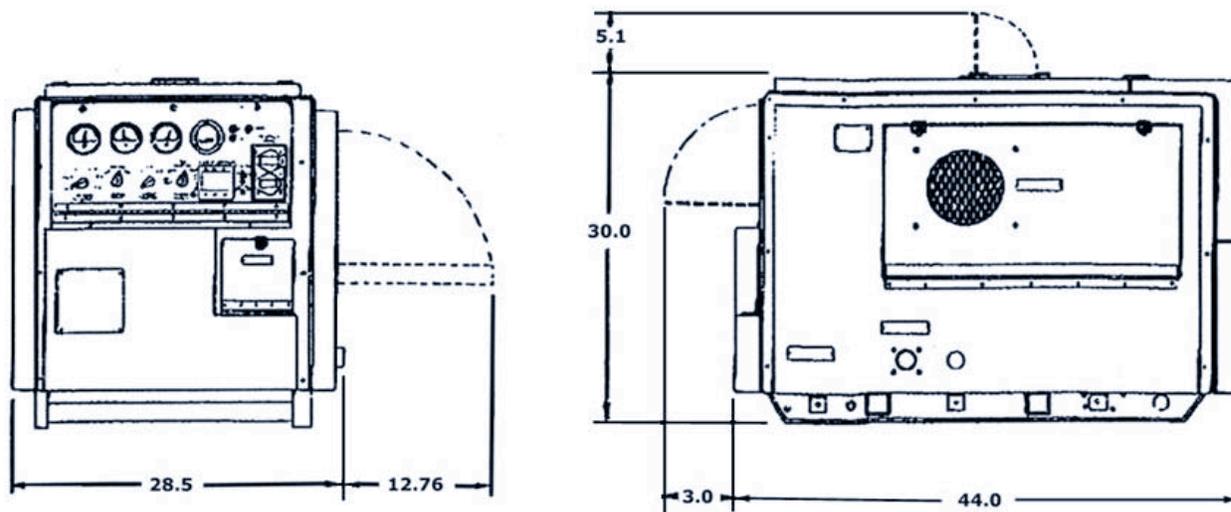
MIL-STD-633FC.3.1.5 Military Standard Generator Set, DED, 3 kW, 60 HzTABLE C-V Characteristic Data for MEP-016B and MEP-701A

Identification Data				
Model	MEP-016B		MEP-701A	
Description	Gen Set, DED, 3kW, 60 Hz		w/Acoustic Suppression Kit (ASK)	
NSN	6115-01-150-4140		6115-01-234-5966	
LIN	G54041		G54041	
SSN				
Specification	NOT PROCURABLE			
Configuration	Tubular frame skid or housed in ASK. Lifting & tie down.			
Trailer Configuration			PP-AN/MJQ-32, FIGURE C-7 PP-AN/MJQ-33, FIGURE C-8	
Physical Characteristics				
Dimensions LWH (in)	35.0 x 23.8 x 25.0		44.0 x 28.5 x 30.0	
Ship Cube (ft ³)	12		20	
Weight (lbs)	Dry 468	Wet: 526	Dry: 532	Wet: 590
Engine	Diesel, 8 horsepower @ 3600 RPM, 24 Volt starter, air cooled, mechanical governor, auxiliary fuel pump.			
Instrumentation	Hourmeter, voltmeter, frequency meter, load meter.			
Fuels	Diesel: DL-1, DL-2 and Jet fuel: JP-8, Jet A-1.			
Fuel Tank Capacity (Gal)	4.5			
Performance Characteristics				
Power Rating	3 kW @ 0.8 pf from -25°F to 125°F/MSL, 107°F/ 5000 ft, 95°F/8000 ft.			
Environmental Capability	-25°F to 125°F, rain, humidity, altitude, sand/dust, transportation, -65°F cold storage, salt spray, fungus.			
Protective Devices	Automatic shut down with emergency bypass for low fuel, low oil, overspeed, and overload.			
Fuel consumption	37 gal/hour @ rated load			
Human Factors	MIL-STD-1474. Operable in arctic and NBC clothing.			
Noise	75 dBA @ 7 meters (23 feet) w/ Acoustic Suppression Kit (ASK).			
Reliability (MTBF)	350 hr (specified)			
Maintenance Ratio				
Electrical Characteristics				
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary alternator.			
EMI	Suppressed to MIL-STD-461 limits.			
EMP	Not protected.			
Motor load				
Voltage Connection	120/208 V, 3 ph, 4 wire	120/240 V, 1 ph, 3 wire	120 V, 1 ph, 2 wire, conv rec	
Voltage adj. Range	197 - 218 V	228 -252 V	114 - 126 V	
Freq. adj. Range	±3%			
Electrical Performance				
Electric Power Quality		Frequency	AC Voltage	DC Voltage
Regulation		3%	4% (5% @ 240V)	4%
Short term steady state stability (30 sec)		1% bandwidth	2% bandwidth	
Long term steady state stability (4 hr)		2% bandwidth	2% bandwidth	2% bandwidth
Application of rated load	transient	3%	30% dip	30% dip
	recovery time	4 sec	2 sec	2 sec
Rejection of rated load	transient	5%	30%	40% rise
	recovery time	6 sec	2 sec	2 sec
Max waveform deviation factor			6% (1 ph); 5% (3 ph)	
Individual waveform harmonic			3% (1 & 3 ph)	
DC ripple				5.5%

MIL-STD-633F

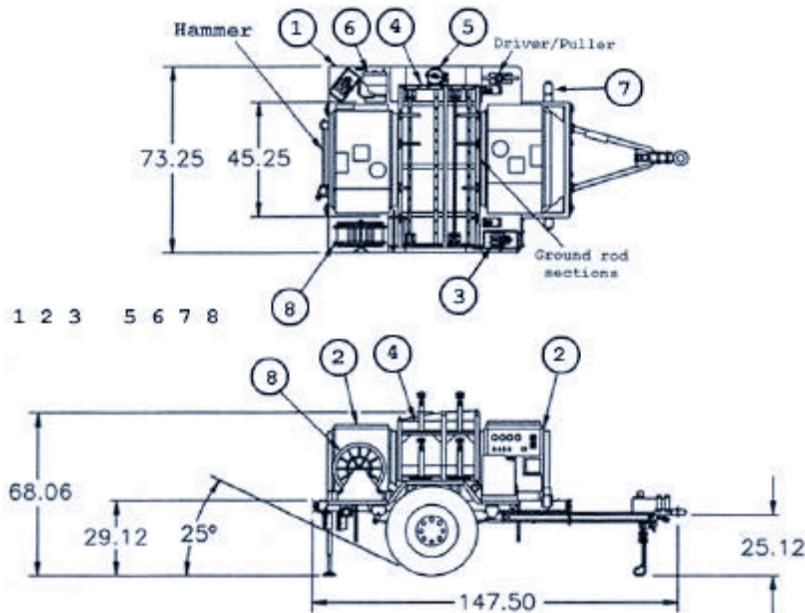
TABLE C-V Characteristic Data for MEP-016B and MEP-701A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Acoustic suppression kit	6115-01-271-1584	64	L+8, W+4, H+3
Diesel upgrade kit* * Available to USMC.	1730-01-418-0970	negligible	none
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-615-12	TO35C2-3-386-31	TM 05926B/06509B-12	NAVFAC P-8-646-12
TM5-6115-615-34	TO35C2-3-386-32	TM 05926B/06509B-34/3	NAVFAC P-8-646-34
TM5-6115-615-24P	TO35C2-3-386-34	SL-4-05926B/06509B-24P/2	NAVFAC P-8-646-24P

FIGURE C-6 Mil Std Generator Set, DED, 3 kW, 60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-32	6115-01-280-2300	Z75718	M548
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
147.5 x 73.3 x 68.1	450	3160	2720
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7478	TA-13228E9895

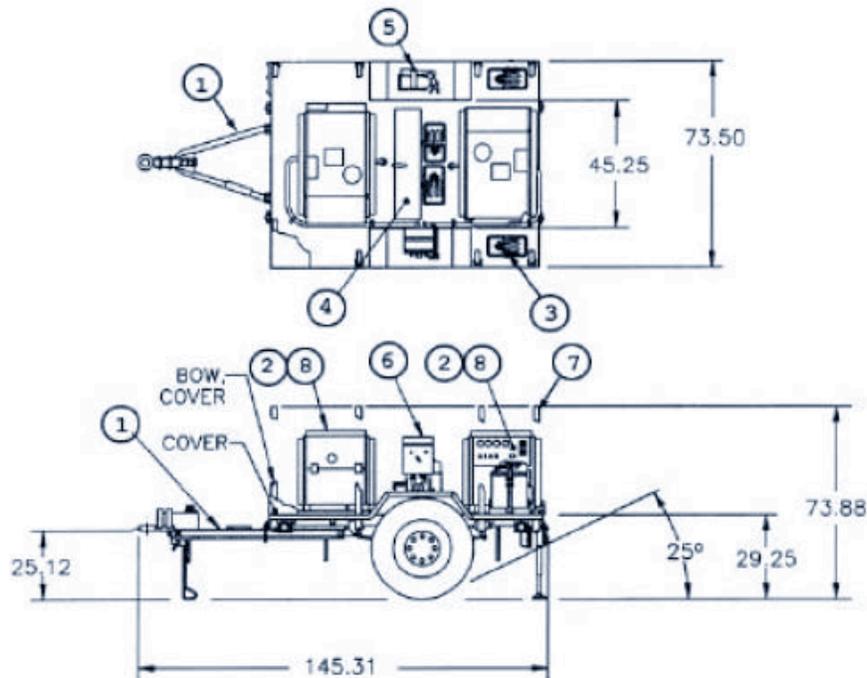


FIND	COMPONENT	QTY	IDENTIFIER
1	3/4 Ton modified Trailer, M116A2	1	97403-13228E9896
2	MEP-701A	2	6115-01-234-5966
3	Fuel can, 5 gallon	2	
4	Stowage rack assembly	1	97403-13228E9902
5	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512
6	Switch box, 97403-13205E5079-3 (old)	1	97403-13229E5765
7	Support masts	1 ea.	97403-13228E9872
8	Cable reel, RC-435/4	1	MIL-R-55566

FIGURE C-7 PP-AN/MJQ-32- Power Plant, DED, 3kW, 60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-33	6115-01-280-2301	Z13577	M506
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
145.3 x 73.5 x 73.9	390	2840	2850
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7478	TA-13229E2300



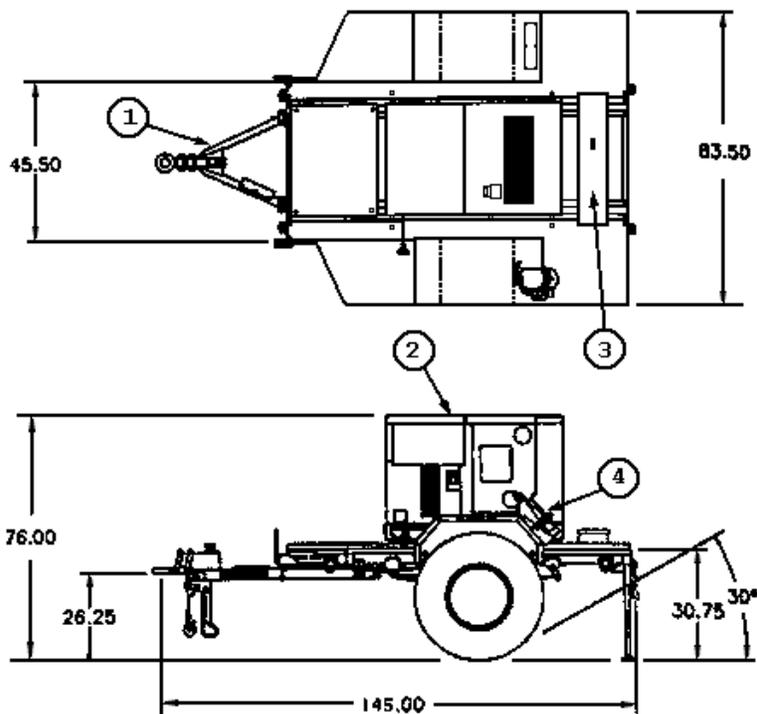
FIND	COMPONENT	QTY	IDENTIFIER
1	3/4 Ton modified Trailer, M116A2	1	97403-13228E9896
2	MEP-701A	2	6115-01-234-5966
3	Fuel can, 5 gallon	2	
4	Accessory box	1	97403-13226E7737
5	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512
6	Switch box, 97403-13205E5079-4 (old)	1	97403-13229E5765
7	Support masts	1 ea.	97403-13228E9872
8	Acoustic Suppression Kit	2	Incl. w/MEP-701A

FIGURE C-8 PP-AN/MJQ-33 - Power Plant, DED, 3kW, 60 Hz

MIL-STD-633F

C.3.1.6 TQG, 5kW, 60 Hz Mounted on M116A3 Trailer

Identification Data			
Model	NSN	LIN	SSN
PU-797	6115-01-332-0741	G42238	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft³)	Wet Weight (lbs)	Ship Weight (lbs)
145 x 84 x 76	535	2320	2360
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-659-13&P	NOT PROCURABLE	97403-13228E1608	TA-13229E5705

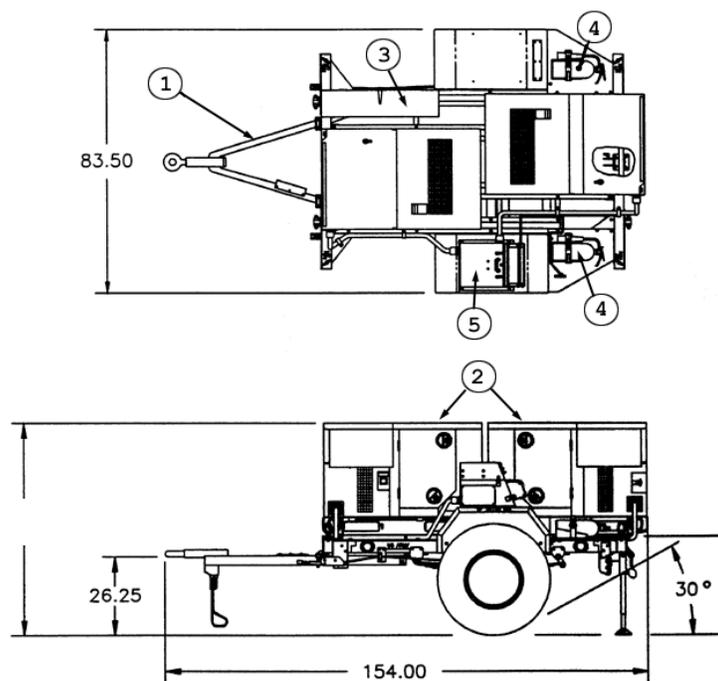


FIN D	COMPONENT	QTY	IDENTIFIER
1	Modified 1 ton trailer, M116A3	1	97403-13229E5757
2	MEP-802A	1	6115-01-274-7387
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-9 PU-797 - TQG Power Unit, 60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-35	6115-01-313-4216	P28083	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
154 x 84 x 74	553	3183	3100
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-659-13&P	NOT PROCURABLE	97403-13228E1609	TA-13229E5650



FIND	COMPONENT	QTY	IDENTIFIER
1	Modified 1 ton trailer, M116A3	1	97403-13229E5757
2	MEP-802A	2	6115-01-274-7387
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512
5	Switch box	1	97403-13230E6535

FIGURE C-10 PP-AN/MJQ-35 - TQG Power Plant, 5 kW, 60 Hz

MIL-STD-633FC.3.1.7 Military Standard Generator Set, GED, 5 kW.TABLE C-VI Characteristic Data for MEP-017A and MEP-022A

Identification Data			
Model	MEP-017A		MEP-022A
Description	5 kW, 60 Hz, GED, TU		5 kW, 400 Hz, GED, TU
NSN	6115-00-017-8240		6115-00-017-8241
LIN	J47068		J48713
SSN			
Specification	NOT PROCURABLE		
Configuration	Tubular frame skid, lifting attachments provided.		
Physical Characteristics			
Dimensions LWH (in)	39.8 x 30.0 x 25.0		
Ship Cube (ft ³)	17		
Weight (lbs)	488	479	
Engine	2 cylinder gasoline, 10 hp @ 3600 (60 Hz) & 3428 (400 Hz) RPM, rope and 24 VDC start, air cooled.		
Instrumentation	Voltmeter, frequency meter, ammeter, hourmeter, oil pressure gage, battery charging ammeter.		
Fuels	Automotive gasoline, (emergency - aviation gasoline)		
Fuel Tank Capacity (Gal)	5.0		
Performance Characteristics			
Power Rating	5 kW @ 0.8 pf from -25°F (-65°F with Winterization kit) to 125°F/MSL, 107°F/ 5000 ft, 95°F/8000 ft.		
Environmental Capability	Rain, humidity, altitude, sand/dust, transportation, 3 foot drop, vibration, cold storage, salt spray, fungus. Operable at incline to 15°.		
Protective Devices	Short circuit, low oil pressure.		
Fuel consumption	1.4 gal/hour @ rated load		
Human Factors	MIL-STD-1474. Man portable.		
Noise	82 dBA @ 25 feet		
Reliability (MTBF)	250 hr (specified)		
Maintenance Ratio			
Electrical Characteristics			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary exciter.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	HAEMP protected.		
Motor load			
Voltage Connection	120/208V, 3ph, 4 wire	120/240V, 1ph, 3 wire	120V, 1ph, 2 wire
Voltage adj. Range	197 - 218 V	228 -252 V	114 - 126 V
Freq. adj. Range	± 3%		
Electrical Performance			
Electric Power Quality	Frequency		AC Voltage
Regulation	3%		4% (5% @ 240 V)
Voltage modulation			
Short term steady state stability (30 sec)	1% bandwidth		2% bandwidth
Long term steady state stability (4 hr)	2% bandwidth		2% bandwidth
Application of rated load	transient	3% under	30% dip
	recovery time	4 sec	2sec
Rejection of rated load	transient	5% over	30% dip
	recovery time	6 sec	2 sec
Max waveform deviation factor			6%-1ph; 5%-3ph
Individual waveform harmonic			3%
DC ripple			

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TABLE C-VI Characteristic Data for MEP-017A and MEP-022A –Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Spark arrester kit	2990-01-032-0757		none
Canvas cover (winterization kit)	6115-00-945-7545	5	negligible
Torch (winterization kit)	4520-00-710-4341		negligible
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-332-14	TO35C2-3-424-1		P-8-614-14
TM5-6115-332-24P	TO35C2-3-424-24		
TM5-2805-258-14	TO38G2-89-21	TM-03523B-14	
TM5-2805-258-24P	TO38G2-89-34	SL-4-035-32B	



MEP-022A

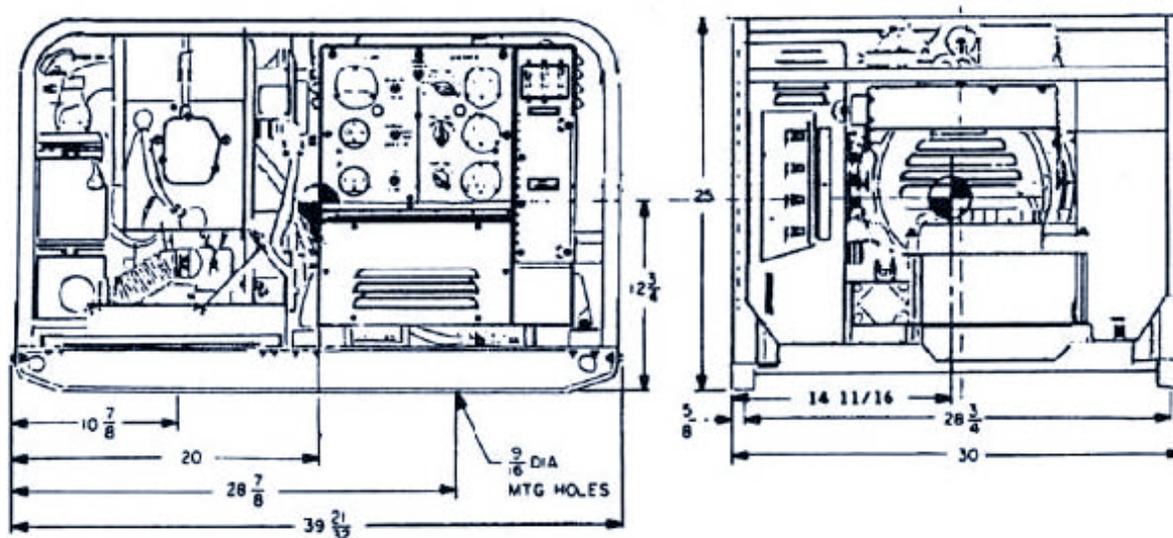


FIGURE C-11 Mil Std Generator Set, GED, 5 kW

MIL-STD-633FC.3.1.8 Military Standard Generator Set, DED, 5 kW, 60 Hz.TABLE C-VII Characteristic Data for MEP-002A

Identification Data			
Model	MEP-002A		
Description	Gen Set, DED, 5 kW, 60 Hz		
NSN	6115-01-465-1044		
LIN	J35813		
SSN	M535		
Specification	NOT PROCURABLE		
Trailer configuration	PU-751/M, FIGURE C-13 ;PP-AN/MJQ-16, FIGURE C-14		
Configuration	Skid mounted, fork lift guides provided.		
Physical Characteristics			
Dimensions LWH (in)	50.6 x 32.0 x 37.0		
Ship Cube (ft ³)	35		
Weight (lbs)	930		
Engine	2 cylinder Diesel, 9.0 horsepower @ 1800 RPM, 24 Volt starter.		
Instrumentation	Hourmeter, voltmeter, frequency meter, ammeter, oil pressure gage, battery charging ammeter.		
Fuels	Diesel: DL-1, DL-2 and Jet fuel: JP-8, Jet A-1.		
Fuel Tank Capacity (Gal)	6.75		
Performance Characteristics			
Power Rating	5 kW @ 0.8 pf from -25°F (-65°F w/ winterization kit) to 125°F/MSL, 107°F/ 5000 ft; 4.5 kW to 95°F/8000 ft.		
Environmental Capability	-25°F to 125°F, rain, humidity, altitude, sand/ dust, transportation, cold storage, salt spray, fungus.		
Protective Devices	MIL-STD-1474. Operable in arctic and NBC clothing.		
Fuel consumption	79 dBA @ 25 feet		
Human Factors	Overload, short circuit, low oil pressure, high temp.		
Noise	0.57 gal/hour @ rated load		
Reliability (MTBF)	500 hr (specified)		
Maintenance Ratio			
Electrical Characteristics			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary alternator.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	Not protected		
Motor load	35% dip, 5 sec recovery		
Voltage Connection	120/208V, 3 ph, 4 wire	120/240V, 1 ph, 3 wire	120V, 1 ph, 2 wire
Voltage adj. Range	205 - 220 V	228 - 252 V	114 - 126 V
Freq. adj. Range	±3%		
Electrical Performance			
Electric Power Quality	Frequency		AC Voltage
Regulation	3%		3%
Voltage modulation			
Short term steady state stability (30 sec)	2% bandwidth		2% bandwidth
Long term steady state stability (4 hr)	3% bandwidth		4% bandwidth
Application of rated load	transient	3% under	20% dip
	recovery time	3 sec	3 sec
Rejection of rated load	transient	3% over	20% rise
	recovery time	3 sec	3 sec
Max waveform deviation factor			6% (1 ph); 5% (3 ph)
Individual waveform harmonic			3%
DC ripple			

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TABLE C-VII Characteristic Data for MEP-002A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Aux fuel burning winterization kit		350 max	41 x 40 x 26
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-548-12	TO35C2-3-456-1	TM 05682C-12	NAVFAC P-8-622-12
TM5-6115-548-34	TO35C2-3-456-2	TM 05682C-34	NAVFAC P-8-622-34
TM5-6115-548-24P	TO35C2-3-456-4	SL-4-05682C	NAVFAC P-8-622-24P
LO5-6115-584-12			

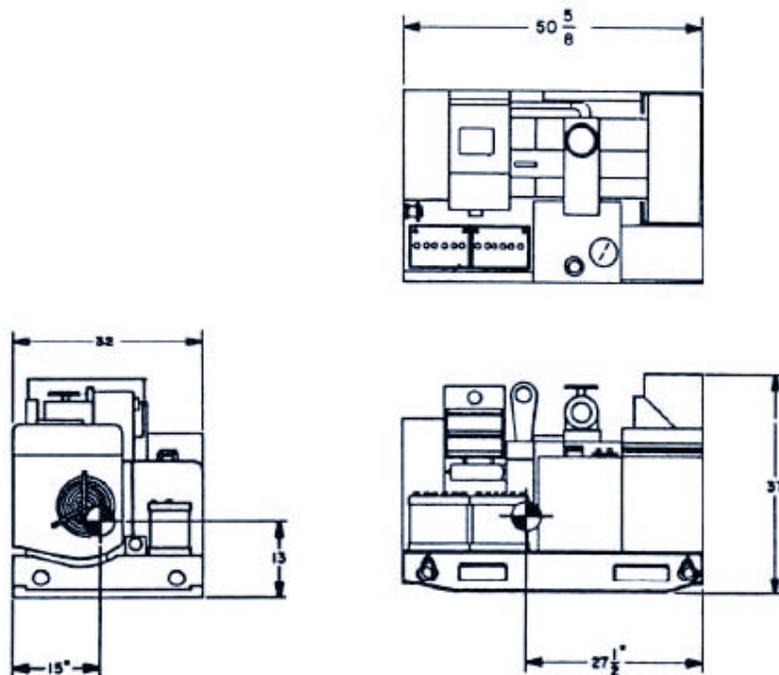
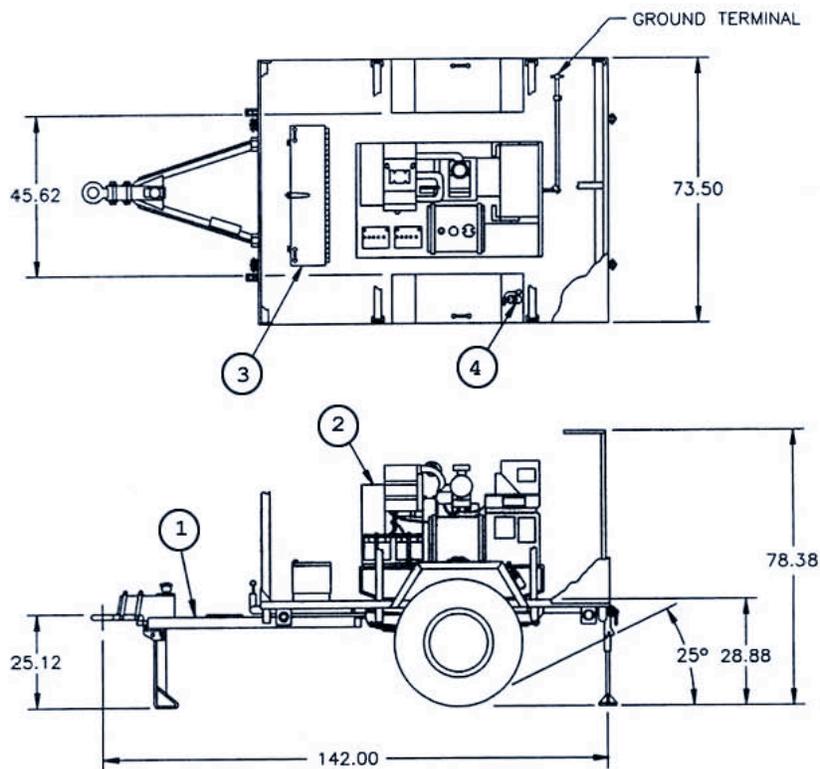


FIGURE C-12 Mil Std Generator Set, 5 kW, DED, 60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-751/M	6115-00-033-1373	G37273	M565
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
142.0 x 73.5 x 78.4	412	2644	2720
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7510	TA-13221E7323

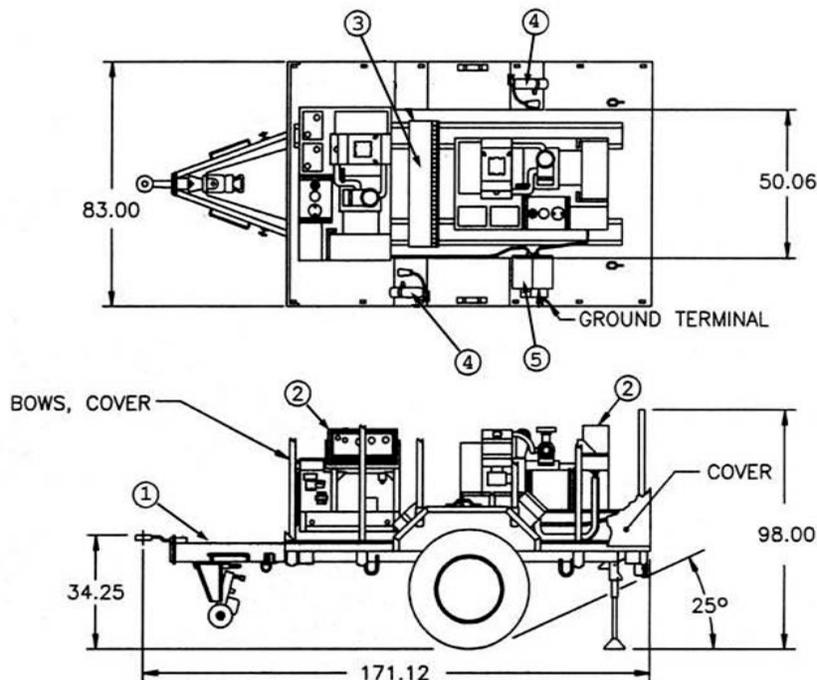


FIND	COMPONENT	QTY	IDENTIFIER
1	3/4 Ton modified Trailer, M116A2	1	97403-13221E7325
2	MEP-002A	1	6115-01-465-1044
3	Accessory box	1	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-13 PU-751/M - Power Unit, DED, 5 kW, 60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-16	6115-01-033-1395	P41832	M538
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
171.1 x 83.0 x 98.0	614	5308	5160
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7506	TA-13220E4455



FIND	COMPONENT	QTY	IDENTIFIER
1	1-1/2 ton flatbed trailer, M103A3/A4	1	97403-13226E5858
2	MEP-002A	2	6115-01-465-1044
3	Accessory box	1	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box, 97403-13212E3601 (old)	1	97403-13229E6535

FIGURE C-14 PP-AN/MJQ-16 - Power Plant, DED, 5 kW, 60 Hz

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C.3.1.9 Auxiliary Power Unit (APU), DED, 5 kW, 28 VDC. This unit is Army Unique - Not Separately Type Classified.

TABLE C-VIII Characteristic Data for MEP-952A

Identification Data		
Model	MEP-952A	
Description	APU, 5 kW, DED, 28 VDC	
NSN	6115-01-317-2139	
LIN		
SSN		
Specification	NOT PROCURABLE	
Configuration	Used with M557 Armored Personnel Carrier and the M1068 Tracked carriers.	
Physical Characteristics		
Dimensions LWH (in)	34.5 x 30.5 x 17.0 (housed APU for external mounting)	
Ship Cube (ft ³)	11.4	
Wet Weight (lbs)	550 (includes housing)	
Engine	Farymann - Diesel, 13.2 hp @ 3000 rpm, Air cooled, Electronic governor, Starter: 28 VDC (from NATO slave receptacle) and hand crank (provided). No belts or pulleys.	
Instrumentation	Start/prime & run/off switch, emergency stop, volt/current meter (with switch). Local and remote switch for remote operation. Indicators for power on, high eng temp, low oil, preheat on. Lamp test.	
Fuels	Diesel DL-1, DL-2 and jet fuel JP-8 and Jet A-1. Provided with quick disconnect fuel line.	
Fuel Tank Capacity (Gal)		
Performance Characteristics		
Power Rating	5 kW (180 amps, 28 VDC), from -25°F to 4000 ft/95°F, derate 17% @ 8000 ft/95°F.	
Environmental Capability	-25°F to 120°F, rain, humidity, sand/dust, cold storage -65°F, salt spray, fungus. Operable at inclines up to 27°.	
Protective Devices	Automatic shut down with emergency bypass for low oil pressure, engine overtemp.	
Fuel consumption	0.42 gal/hour	
Human Factors	MIL-STD-1474	
Noise	70 dBA @ 7 meters (23 feet)	
Reliability (MTBF)		
Maintenance Ratio		
Electrical Characteristics		
Basic Design	Uses a Bradley M2/M3, Alternator. Brushless, solid state rectifier, solid state regulator. Capable of 280 amps @ 3000 rpm.	
EMI	Suppressed to MIL-STD-461 limits.	
EMP	Protected	
Motor load		
Voltage Connection	28VDC, NATO slave receptacle.	
Voltage adj. Range	23 – 35 V	
Freq. adj. Range		
Electrical Performance		
Electric Power Quality	DC Voltage	
Regulation	4%	
Voltage modulation		
Short term steady state stability (30 sec)	2% bandwidth	
Long term steady state stability (4 hr)	2% bandwidth	
Application of rated load	transient	30%
	recovery time	1 sec
Rejection of rated load	transient	40%
	recovery time	0.5 sec
Max waveform deviation factor		
Individual waveform harmonic		
DC ripple	5.5%	

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TABLE C-VIII Characteristic Data for MEP-952A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
None			
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-664-14			



MEP-952A on M557
(Power connector side)



MEP-952A on M557

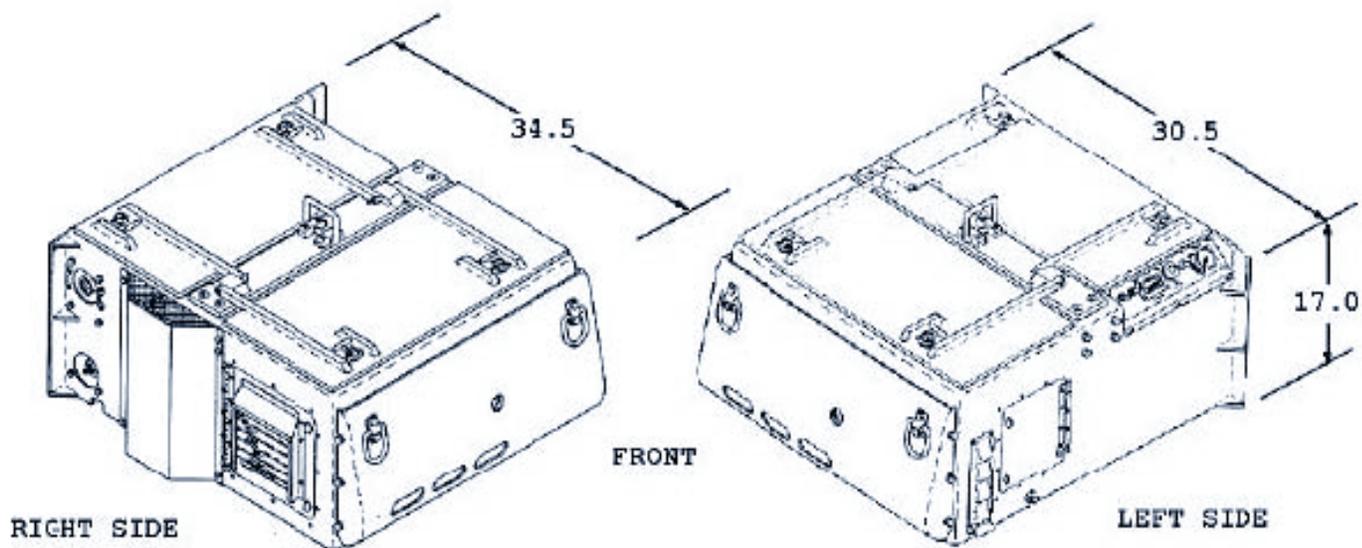
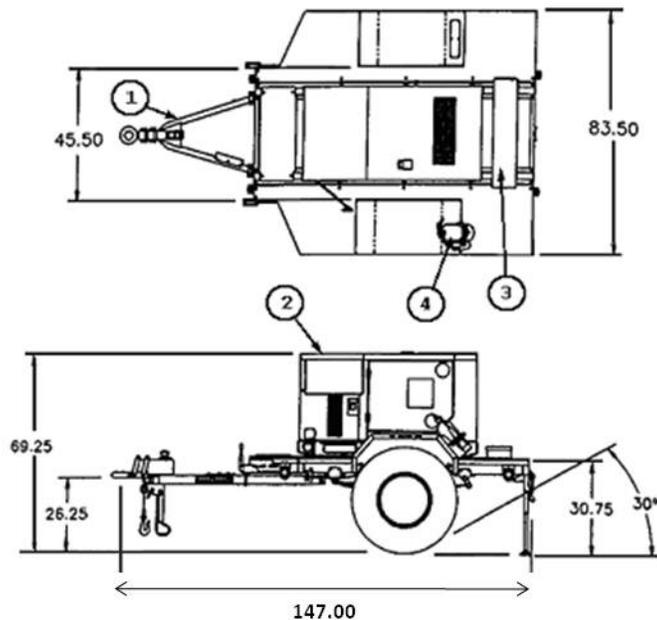


FIGURE C-15 Auxiliary Power Unit, DED, 5 kW, 28 VDC

MIL-STD-633FC.3.1.10 TQG, 10 kW, 60 Hz (MEP-802A) Mounted on M116A3 Trailer.

Identification Data			
Model	NSN	LIN	SSN
PU-798	6115-01-319-9032	G42170	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft³)	Wet Weight (lbs)	Ship Weight (lbs)
145 x 84 x 76	535	2454	2380
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-660-13&P	NOT PROCURABLE	97403-13228E1611	TA-13229E5715

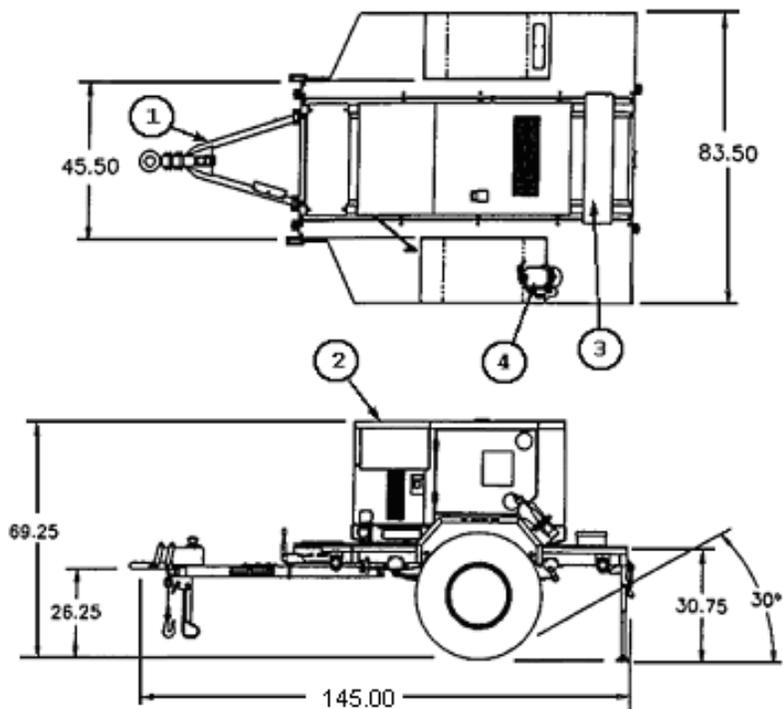


FIND	COMPONENT	QTY	IDENTIFIER
1	1 Ton modified Trailer, M116A3 (shown)	1	97403-13229E5757
2	MEP-803A	1	6115-01-275-5061
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-16 PU-798 - TQG Power Unit, 10 kW, 60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-799	6115-01-313-4283	G53403	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
145 x 84 x 76	535	2485	2410
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-660-13&P	NOT PROCURABLE	97403-13228E1611	TA-13229E5725



FIND	COMPONENT	QTY	IDENTIFIER
1	Modified 1 ton trailer, M116A3	1	97403-13229E5757
2	MEP-813A	1	6115-01-274-7392
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-17 PU-799 - TQG Power Unit, 400 Hz

MIL-STD-633F

C.3.1.11 Military Standard Generator Set, DED, 10 kW.

TABLE C-IX Characteristic Data for MEP-003A and MEP-112A

Identification Data			
Model	MEP-003A		MEP-112A
Description	Generator Set, DED, 10kW, 60 Hz		Generator Set, DED, 10kW, 400 Hz
NSN	6115-00-465-1030		6115-00-465-1027
LIN	J35825		G35981
SSN	M529		M565
Specification	NOT PROCURABLE		
Trailer Configuration	PU-753M, FIGURE C-19 , PP-AN/MJQ-18, FIGURE C-20		PP-AN/MJQ-25, FIGURE C-21
Physical Characteristics			
Dimensions LWH (in)	50.6 x 32.0 x 37.0		
Ship Cube (ft ³)	35		
Wet Weight (lbs)	1240	1325	
Engine	4 cylinder Diesel, 20 hp @ 1800/2000 RPM, air cooled, 24 Volt starter.		
Instrumentation	Hourmeter, voltmeter, frequency meter, ammeter, oil pressure gage, battery charging ammeter.		
Fuels	Diesel: DL-1, DL-2 and Jet fuel: JP-8, Jet A-1.		
Fuel Tank Capacity (Gal)	12.5		
Performance Characteristics			
Power Rating	10 kW @ 0.8 pf from -25°F (-65°F with winterization kit) to 125°F/MSL, 107°F/ 5000 ft, 9 kW to 95°F/8000 ft.		
Environmental Capability	-25°F(-65°F w/wint kit) to 125°F, rain, humidity, altitude, sand/dust, transportation, cold storage, salt spray, fungus.		
Protective Devices	Overload, short circuit, low oil pressure, high temp.		
Fuel consumption	1.09 gal/hour @ rated load		
Human Factors	MIL-STD-1474. Operable in arctic and NBC clothing.		
Noise	77 dBA @ 25 feet		
Reliability (MTBF)	500 hr (specified)		
Maintenance Ratio			
Electrical Characteristics			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary alternator.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	None		
Motor load	35% dip, 5 sec recovery		
Voltage Connection	120/208V, 3 ph, 4 wire	240V, 1 ph, 3 wire	120V, 1 ph, 2 wire
Voltage adj. Range	205 - 220 V	228 - 252 V	114- 126 V
Freq. adj. Range	±3% for 60 Hz)		±4% for 400 Hz
Electrical Performance			
Electric Power Quality	Frequency		AC Voltage
Regulation	3%		3%
Voltage modulation			
Short term steady state stability (30 sec)	2% bandwidth		2% bandwidth
Long term steady state stability (4 hr)	3% bandwidth		4% bandwidth
Application of rated load	transient	3% under	20% dip
	recovery time	3 sec	3 sec
Rejection of rated load	transient	4% over	20% rise
	recovery time	3 sec	3 sec
Max waveform deviation factor			6% (1 ph); 5% (3 ph)
Individual waveform harmonic			3% (1 ph); 2% (3 ph)
DC ripple			

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TABLE C-IX Characteristic Data for MEP-003A and MEP-112A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Aux fuel burning winterization kit		350 max	41 x 40 x 26
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-585-12	TO35C2-3-455-1	TM 05684C-12	NAVFAC P-8-623-12
TM5-6115-585-34	TO35C2-3-455-2	TM 05684C-34	NAVFAC P-8-623-34
TM5-6115-585-24P	TO35C2-3-455-4	SL-4-05684C	NAVFAC P-8-623-24P



MEP-003A or MEP-112A

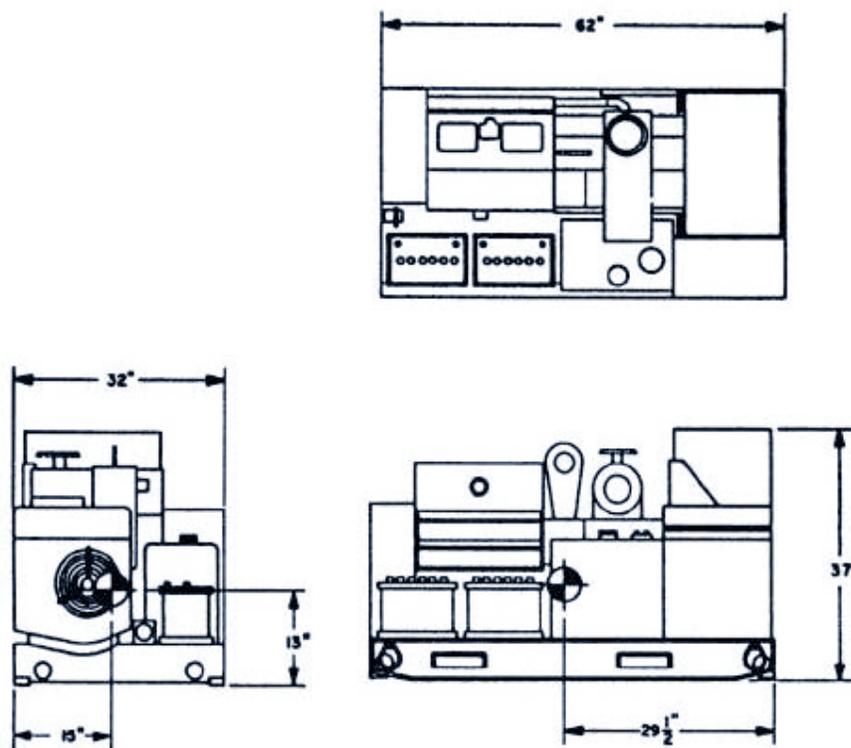
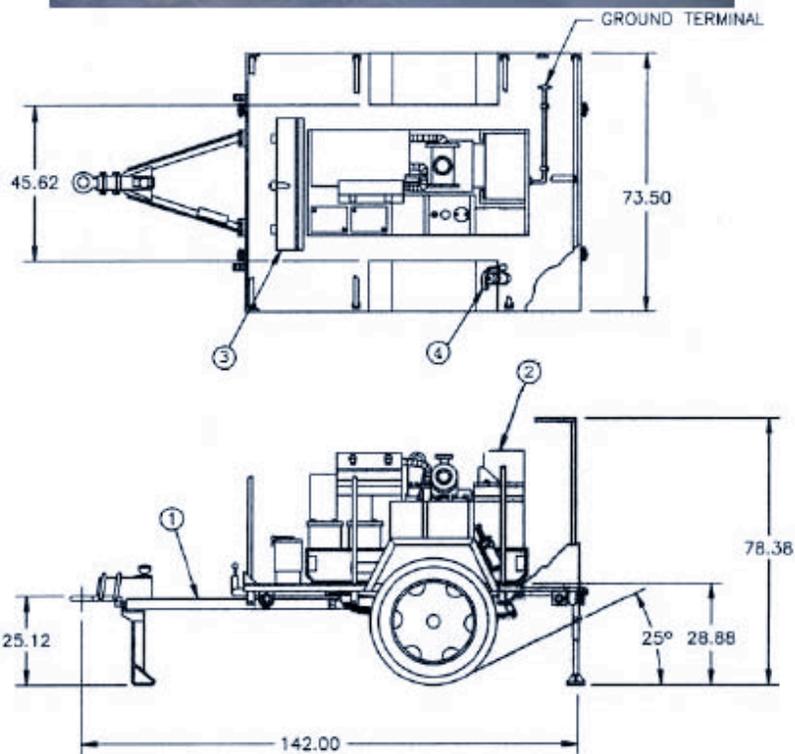


FIGURE C-18 Mil Std Generator Set, DED, 10 kW

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-753/M	6115-00-033-1389	G40744	M567
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
142.0 x 73.5 x 78.4	412	3040	3060
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7508	TA-13221E7330

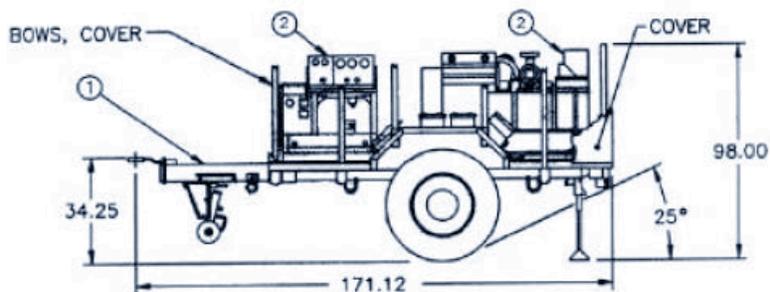
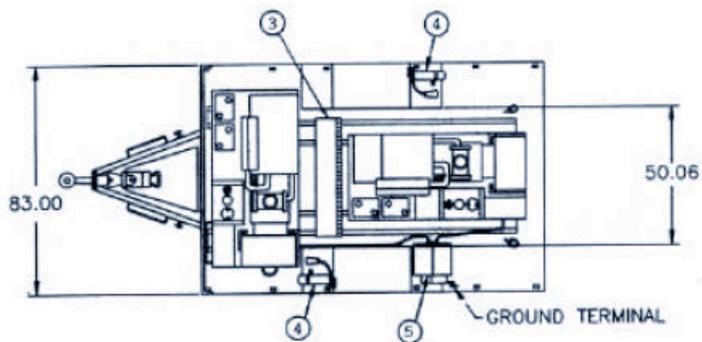


FIND	COMPONENT	QTY	IDENTIFIER
1	3/4 Ton modified Trailer, M116A2	1	97403-13221E7325
2	MEP-003A	1	6115-00-465-1030
3	Accessory box	1	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512

FIGURE C-19 PU-753/M – Power Unit, DED, 10 kW, 60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-18	6115-00-033-1398	P28015	M540
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
171.1 x 83.0 x 98.0	614	5930	5900
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7504	TA-13220E4465

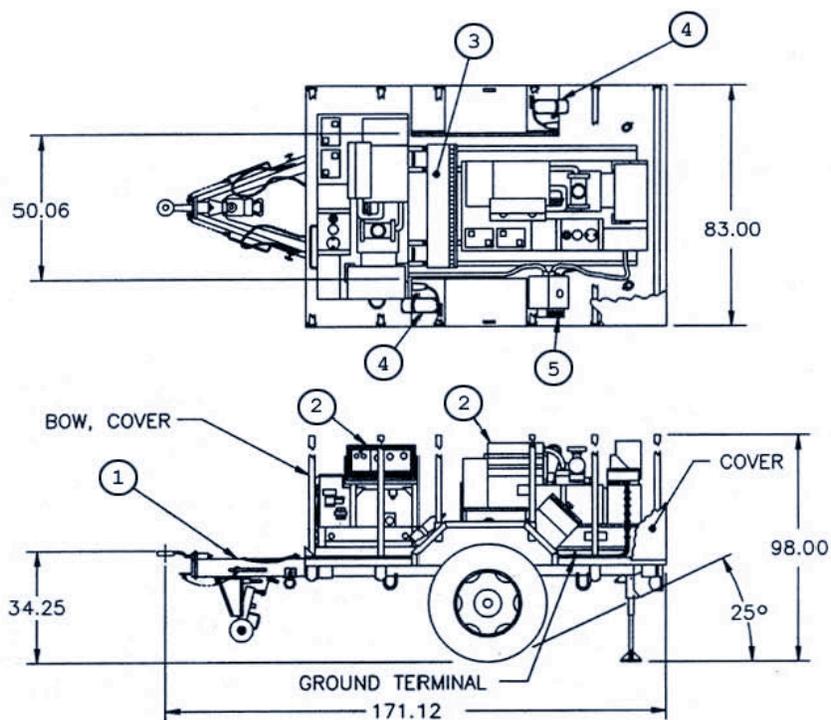


FIND	COMPONENT	QTY	IDENTIFIER
1	1-1/2 ton flatbed trailer, M103A3/A4	1	97403-13226E5858
2	MEP-003A	2	6115-00-465-1030
3	Accessory box	1	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box, 97403-13226E5859 (old)	1	97403-13229E6535

FIGURE C-20 PP-AN/MJQ-18 – Power Plant, DED, 10 kW, 60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-25	6115-01-153-7742	P42364	M523
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
171.1 x 83.0 x 98.0	614	5980	5960
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7512	TA-13226E5860



FIND	COMPONENT	QTY	IDENTIFIER
1	1-1/2 ton flatbed trailer, M103A3/A4	1	97403-13226E5858
2	MEP-112A	2	6115-01-465-1027
3	Accessory box	1	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box	1	97403-13226E5859

FIGURE C-21 PP-AN/MJQ-25 – Power Plant, DED, 10 kW, 400 Hz

MIL-STD-633FC.3.1.12 Military Standard Generator Set, GED, 10 kW.TABLE C-X Characteristic Data for MEP-018A and MEP-023A

Identification Data			
Model	MEP-018A		MEP-023A
Description	10 kW, 60 Hz, GED, TU		10 kW, 400 Hz, GED, TU
NSN	6115-00-889-1447		6115-00-926-0843
LIN	J49398		J49466
SSN			
Specification	NOT PROCURABLE		
Configuration	Tubular frame skid, lifting attachments provided.		
Physical Characteristics			
Dimensions LWH (in)	57.0 x 30.0 x 28.4		51.0 x 30.0 x 27.0
Ship Cube (ft ³)	28		24
Weight (lbs)	850		650
Engine	4 cylinder gasoline, 20 hp @ 3600 (60 Hz) & 3428 (400 Hz) RPM, rope and 24 VDC start, air cooled.		
Instrumentation	Voltmeter, frequency meter, ammeter, hourmeter, oil pressure gage, battery charging ammeter.		
Fuels	Automotive gasoline, emergency - aviation gasoline		
Fuel Tank Capacity (Gal)	5.0		
Performance Characteristics			
Power Rating	10 kW @ 0.8 pf from -25°F (-65°F with winterization kit) to 125°F/MSL, 107°F/ 5000 ft, 95°F/8000 ft.		
Environmental Capability	Rain, humidity, altitude, sand/dust, transportation, 3 foot drop, vibration, cold storage: -45°F, salt spray, fungus. Operable at incline to 15%.		
Protective Devices	Short circuit, low oil pressure.		
Fuel consumption	2.4 gal/hour @ rated load		
Human Factors	MIL-STD-1474		
Noise	82 dBA @ 25 feet		
Reliability (MTBF)	250 hr (specified)		
Maintenance Ratio			
Electrical Characteristics			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary exciter.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	None.		
Motor load	40% dip; 4 sec		
Voltage Connection	120/208 V, 3ph, 4 wire	120/240 V, 1ph, 3 wire	120 V, 1ph, 2 wire
Voltage adj. Range	197 - 218 V	228 -252 V	114 - 126 V
Freq. adj. Range	±3 %		
Electrical Performance			
Electric Power Quality	Frequency		AC Voltage
Regulation	3%		3%; 4% - 240V 3 wire
Voltage modulation			
Short term steady state stability (30 sec)	1% bandwidth		1% bandwidth
Long term steady state stability (4 hr)	2% bandwidth		1% bandwidth
Application of rated load	transient	3% under	20% dip
	recovery time	4 sec	2 sec
Rejection of rated load	transient	5% over	20% rise
	recovery time	6 sec	2 sec
Max waveform deviation factor			6%-1ph; 5%-3ph
Individual waveform harmonic			2%
DC ripple			

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TABLE C-X Characteristic Data for MEP-018A and MEP-023A - Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Spark arrester kit	2990-01-032-3750		none
Canvas cover (winterization kit)	6115-00-066-4933	10	negligible
Torch (winterization kit)	4520-00-710-4341		negligible
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-275-14	TO35C2-3-452-1		P-8-615-14
TM5-6115-275-24P	TO35C2-3-452-24		P-8-615-24P
TM5-2805-259-14	TO38G2-89-41	TM-03524B-14	
TM5-2805-259-24P	TO38G2-89-54	SL-4-035-24B	



MEP-018A

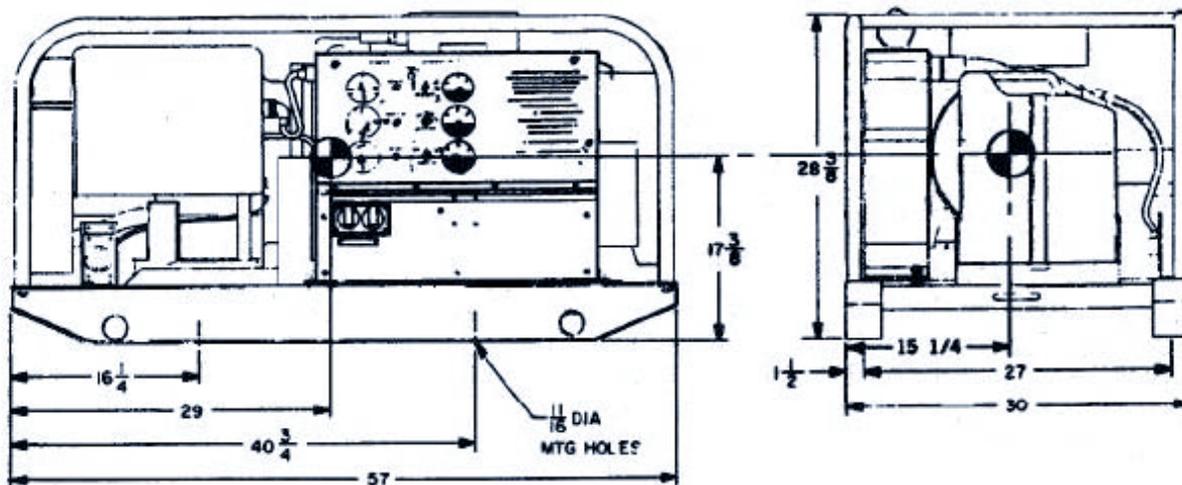


FIGURE C-22 Mil Std Generator Set, GED, 10 kW

MIL-STD-633F**C.3.1.13 Auxiliary Power Unit, DED, 10 kW, 60 Hz. (Not Separately Type Classified).****TABLE C-XI Characteristic Data for MEP-903A**

Identification Data			
Model	MEP-903A		
Description	APU, 10 kW, DED, 60 Hz		
NSN	6115-01-431-3062		
LIN			
SSN			
Specification	NOT PROCURABLE		
Configuration	Used with SICPS shelter.		
Physical Characteristics			
Dimensions LWH (in)	36 x 26.5 x 27.7		
Ship Cube (ft ³)	15.3		
Wet Weight (lbs)	460 lb on rail for shelter tunnel insertion		
Engine	Kubota turbocharged diesel, 22.8 hp @ 3600 rpm, liquid cooled, Electronic governor, Starter: 28 VDC (from vehicle). No belts or pulleys. 20 amp battery charger.		
Instrumentation	Start/stop/preheat switch, volt meter, frequency meter, battery charging ammeter, percent load. Indicator for power on and malfunction indicator energizes appropriate fault lamp.		
Fuels	Diesel DL-1, DL-2 and jet fuel JP-8 and Jet A-1. Uses vehicle fuel via quick disconnect fuel line.		
Fuel Tank Capacity (Gal)			
Performance Characteristics			
Power Rating	10 kW, 60 Hz @ .8 pf from -25°F to 120°F, 4000 ft/95 °F. Derate 3.5% per 1000 ft above 4000 ft up to 8000 ft.		
Environmental Capability	(when housed in shelter tunnel) -25°F to 120°F, rain, humidity, sand/dust, -60°F cold storage, salt spray, fungus.		
Protective Devices	Automatic shut down with emergency bypass for overspeed, low oil pressure, low fuel (day tank), high coolant temperature, overvoltage, undervoltage, short circuit, overload, AC interrupt, battle short.		
Fuel consumption			
Human Factors	MIL-STD-1474		
Noise	70 dBA @ 7 meters (23 feet)		
Reliability (MTBF)	400 hr		
Maintenance Ratio			
Electrical Characteristics			
Basic Design	Alternator: brushless, solid state regulator, 2 pole, 3600 rpm, sealed bearings. Shelter has standard power outlets.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	HAEMP protected		
Motor load	40% dip ,5 sec recovery		
Voltage Connection	120V, 1 phase, 2 wire	120/240V, 1 phase, 3 wire	
Voltage adj. Range	114 - 126 V	228 - 252 V	
Freq. adj. Range	±3%		
Electrical Performance			
Electric Power Quality	Frequency	AC Voltage	DC Voltage
Regulation	3%	3%	
Voltage modulation		3%	
Short term steady state stability (30 sec)	2% bandwidth	2% bandwidth	
Long term steady state stability (4 hr)	3% bandwidth	4% bandwidth	
Application of rated load	transient	3% under	20% dip
	recovery time	3 sec	1 sec
Rejection of rated load	transient	3% over	30% rise
	recovery time	3 sec	1 sec
Max waveform deviation factor		6%	
Individual waveform harmonic		2%	

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TABLE C-XI Characteristic Data for MEP-903A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
None			
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-670-14&P			



10 kW APU and control panel
removed from shelter. --
rear view --



10 kW APU ready to slide
into shelter.
- front view -

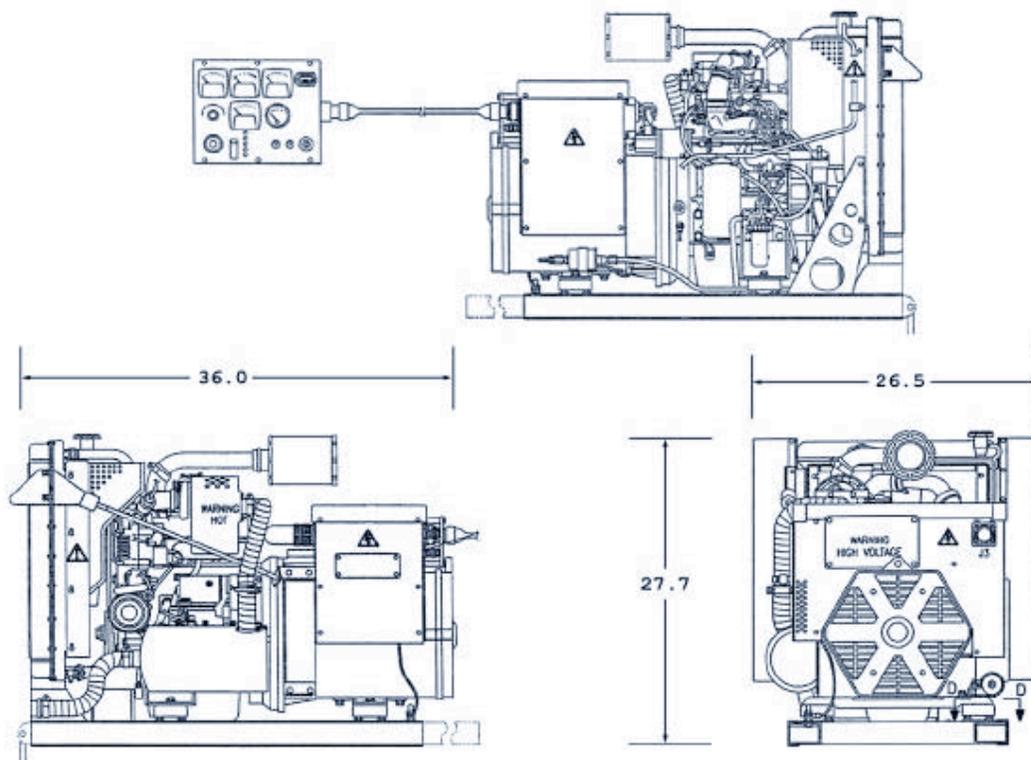


FIGURE C-23 Auxiliary Power Unit (APU), DED, 10 kW, 60 Hz

MIL-STD-633F

C.3.1.14 TQG Generator Set, DED, Skid Mounted, 15 kW.

TABLE C-XII Characteristic Data for MEP-804A and MEP 814A

Identification Data						
Model	MEP-804A			MEP-814A		
Description	TQG, DED, 15 kW 50/60 Hz, Skid Mounted			TQG, DED, Skid Mounted, 15 kW, 400 Hz		
NSN	6115-01-274-7388			6115-01-274-7393		
LIN	G12170			G12238		
SSN	M53500			M53500		
Specification	NOT PROCURABLE (MIL-DTL-53133/5)			NOT PROCURABLE (MIL-DTL-53133/6)		
Trailer Configuration	PU-801: FIGURE C-26 ; PU-801A: FIGURE C-27 ; PU-802: FIGURE C-28 ; PP-AN/MJQ-48: FIGURE C-30 ; PP-AN/MJQ-48A: FIGURE C-31			PU-800: FIGURE C-25 ; PP-AN/MJQ-39: FIGURE C-29		
Physical Characteristics						
Dimensions LWH (in)	70 x 36 x 55					
Ship Cube (ft ³)	77					
Wet Weight (lbs)	2124			2238		
Engine	Yanmar - Model:4TNV84T-DFM 4 Cycle, Liquid Cooled, 4 Cyl, 3.31 Inch Bore, 40 BHP @ 1800 RPM, 24 VDC starter					
Instrumentation	Hour meter, voltmeter, frequency, amps (% RL), oil pressure, fuel, coolant temp, battery amps, emergency stop, battle short.					
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8.					
Fuel Tank Capacity (Gal)	14					
Performance Characteristics						
Power Rating	15kW 12.5kW @ 50Hz), 0.8 pf @4K ft/120°F; 110% Max Power; De-rate: 3.5%/1K ft from 4K – 8K ft					
Environmental Capability	-25°F (-50°F W/kit) to 125°F, rain, humidity, altitude, sand/dust, transportation, cold storage: -60°F, salt spray, fungus, 15° incline.					
Protective Devices	Automatic shut down with emergency bypass for low oil pressure, coolant high-temperature, no fuel, over-speed, and over-voltage.					
Fuel consumption	1.44 gal/hour @ rated load			1.75 gal/hour @ rated load		
Human Factors	MIL-STD-1474					
Noise	70 dBA @ 7 meters (23 feet)					
Reliability (MTBF)	594 hr @ 80% LCL			377 hr @ 80% LCL		
Maintenance Ratio	less than 0.05					
Electrical Characteristics						
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, brushless Marathon/Lima generator.					
EMI	Meets MIL-STD-461C Part 9.					
EMP	HAEMP IAW MIL-STD-2169					
Motor load	30% dip, 0.7 sec to 95% init volt			25% dip, 0.7 sec to 95% init volt		
Voltage Connection	120/208V, 3ph, 4 wire			240/416V, 3ph, 4 wire		
Frequency	50 Hz	60 Hz	400 Hz	50 Hz	60 Hz	400 Hz
Voltage adj. Range	190 – 213 V	197 - 240 V	197 - 229 V	380 – 426 V	395 - 480 V	395 - 458 V
Freq. adj. Range	± 2 Hz for 50/60 Hz			390 – 420 V Hz for 400 Hz		
Electrical Performance						
Electric Power Quality	MEP 804A			MEP-814A		
	Frequency	AC Voltage		Frequency	AC Voltage	
Regulation	0.25%	1%		0.25%	1%	
Voltage modulation		1%			1%	
Short term steady state stability (30 sec)	0.5% bandwidth	1% bandwidth		0.5% bandwidth	1% bandwidth	
Long term steady state stability (4 hr)	1% bandwidth	2% bandwidth		1% bandwidth	2% bandwidth	
Application of rated load	transient	4% under	15% dip	1.5% under	12% dip	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Rejection of rated load	transient	4% over	15% rise	1.5% over	12% rise	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Max waveform deviation factor		5%				
Individual waveform harmonic		2%				

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TABLE C-XII Characteristic Data for MEP-804A and MEP 814A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Winterization kit	6115-01-477-0566	TB 9-6115-643-13	None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
Operators	TM 9-6115-643-10	TO 35C2-3-455-21	None
Unit, DS, GS	TM 9-6115-643-24	TO 35C2-3-455-22	
RPSTL	TM 9-6115-643-24P	TO 35C2-3-455-24	
Engine Maintenance	TM 9-2815-254-24	TO 38G1-94-2	
Engine Parts	TM 9-2815-254-24P	TO 38G1-94-4	
Lube Order	LO 9-6115-643-12		
Warranty	TB 9-6115-643-24		

MEP-804A/ MEP-814A

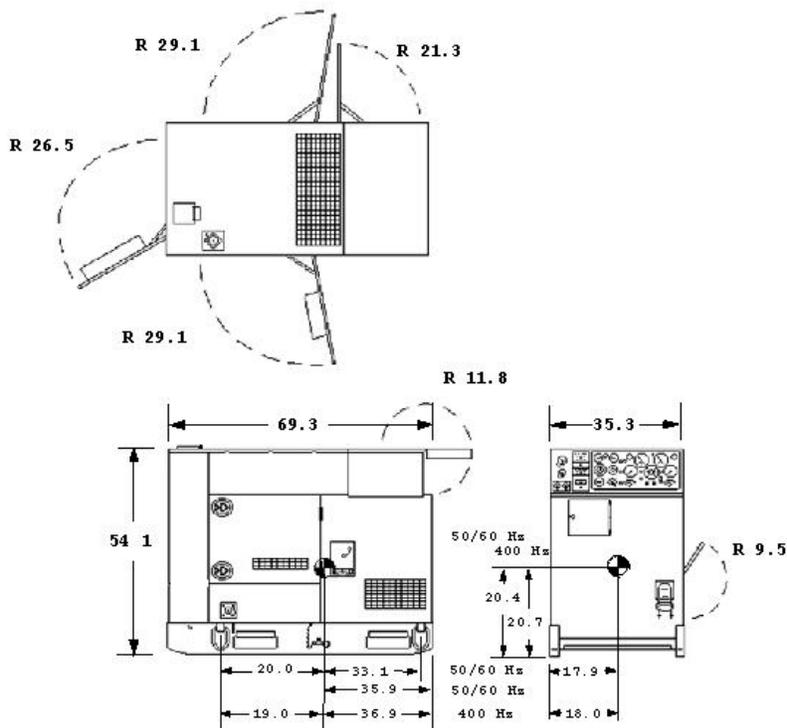
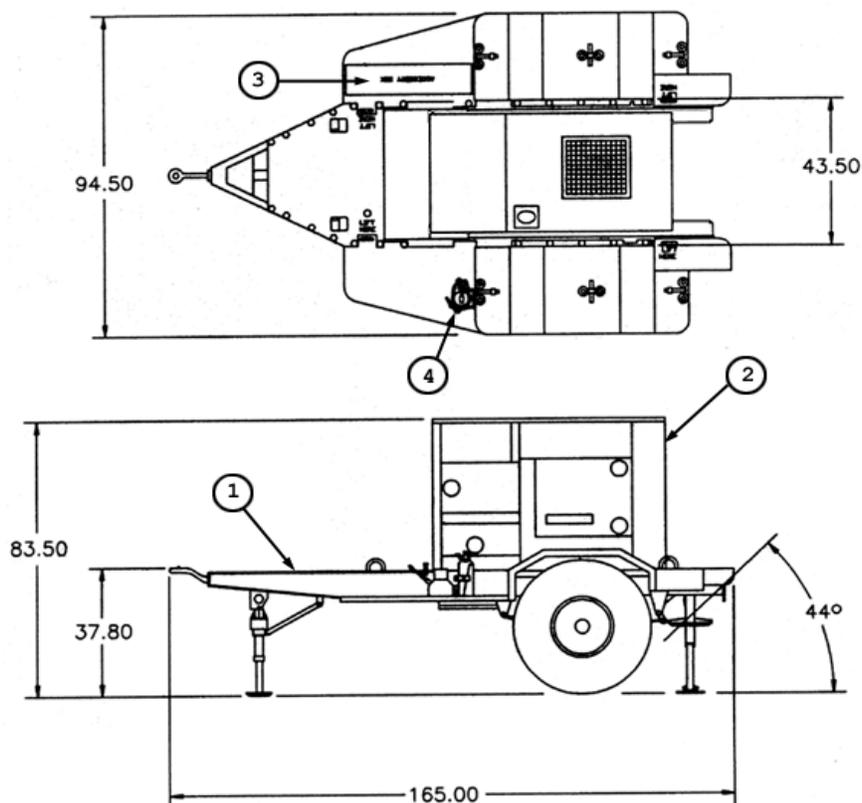


FIGURE C-24 TQG Generator Set, DED, 15 kW -

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-800	6115-01-317-2137	G78203	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 84	761	4975	4855
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	NOT PROCURABLE	97403-13228E1614	TA-13229E5735

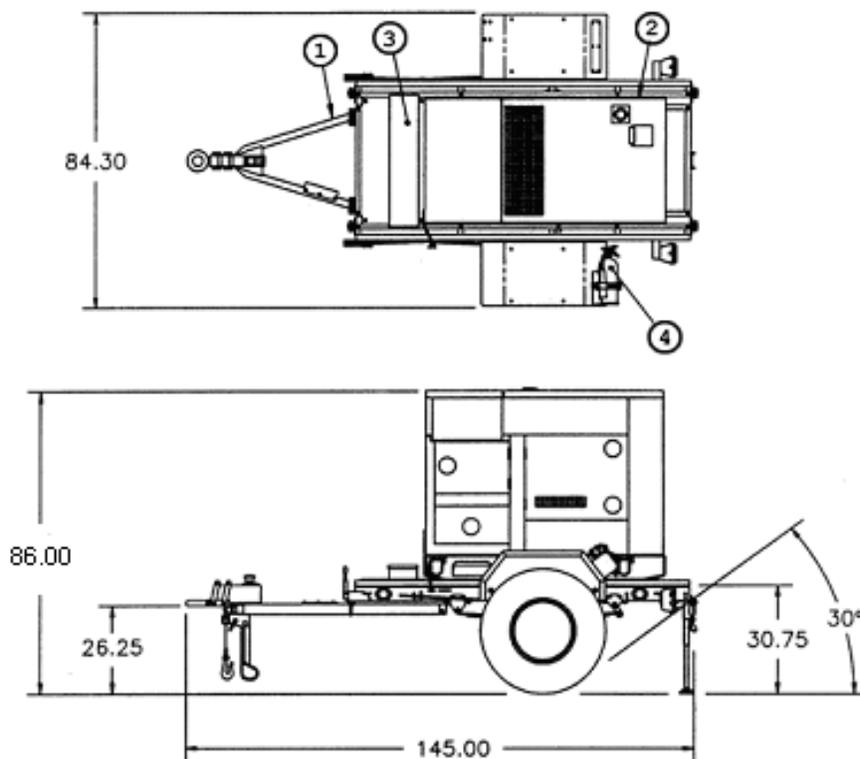


FIND	COMPONENT	QTY	IDENTIFIER
1	2 1/2 Ton modified Trailer, M200A1	1	97403-13229E9623
2	MEP-814A	1	6115-01-274-7393
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-25 PU-800 - TQG Power Unit, 15 kW, 400 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-801	6115-01-319-9033	G78374	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
145 x 85 x 86	613	3416	3300
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	NOT PROCURABLE	97403-13228E1613	TA-13229E5640

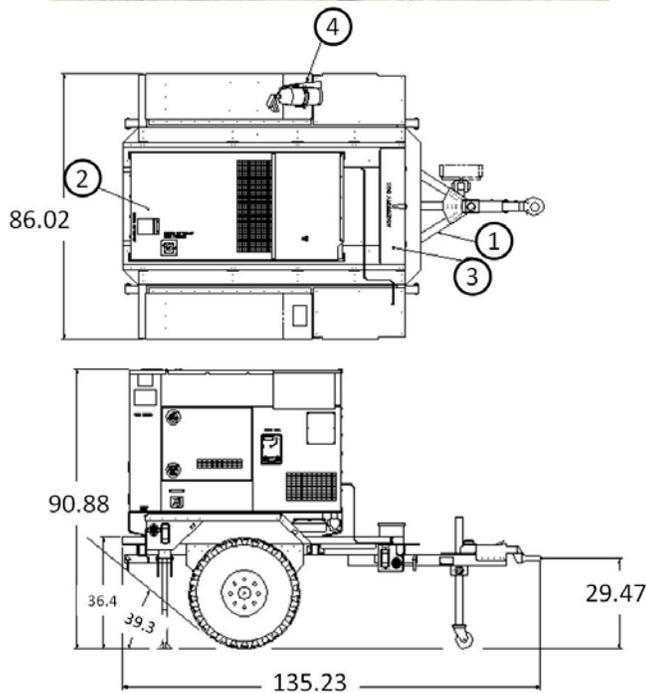


FIND	COMPONENT	QTY	IDENTIFIER
1	Modified 1 ton trailer, M116A3	1	97403-13229E5757
2	MEP-804A	1	6115-01-274-7388
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-26 PU-801 - TQG Power Unit, 15 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-801A	6115-01-413-3821	G78374	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 91	611	3516	3400
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	NOT PROCURABLE	97403-13228E1613	TA-13230E6560

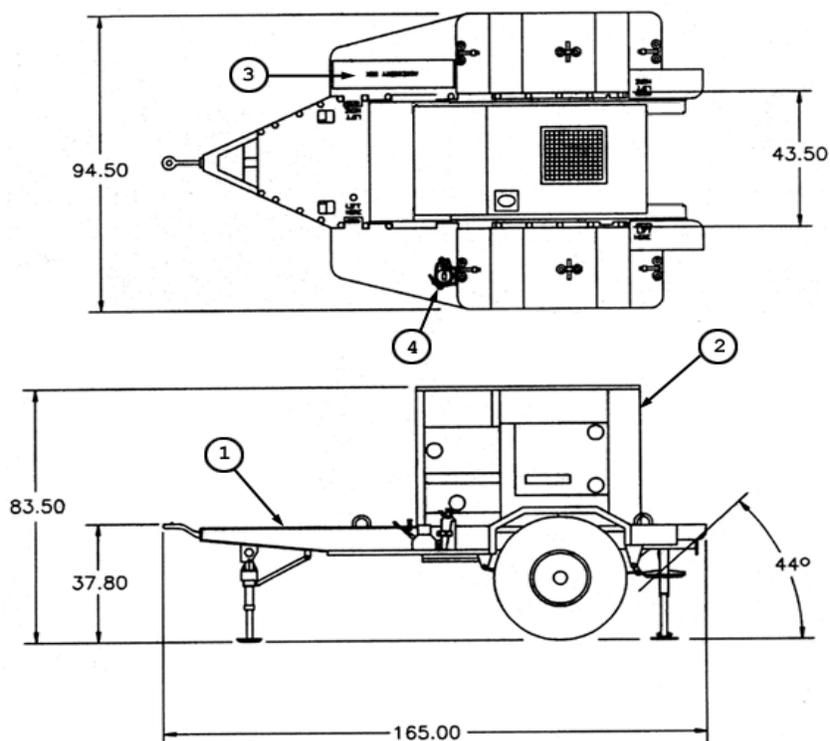


FIND	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT)	1	97403-13230E6565
2	MEP-804A	1	6115-01-274-7388
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-27 PU-801A - TQG Power Unit, 15 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-802	6115-01-317-2138	G53778	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 84	754	5040	4920
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	NOT PROCURABLE	97403-13228E1614	TA-13229E5740

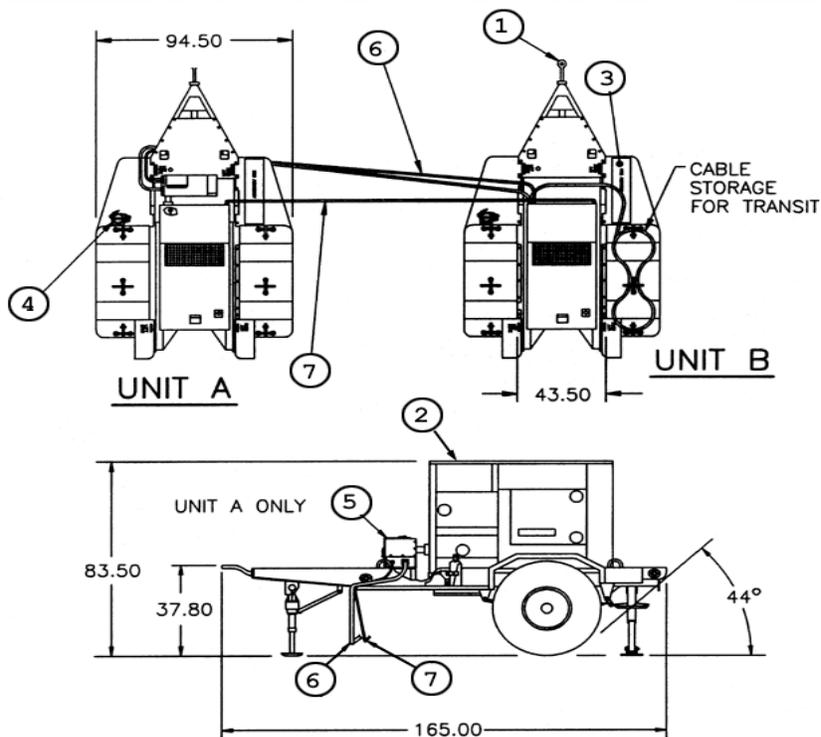


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13229E9632
2	MEP-804A	1	6115-01-274-7388
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-28 PU-802 - TQG Power Unit, 15 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-39	6115-01-299-6034	P42614	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165 x 95 x 84 each	754 each	Unit A: 4863 Unit B: 4893	Unit A: 4765 Unit B: 4765
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	NOT PROCURABLE	97403-13228E1614	TA-13229E5690

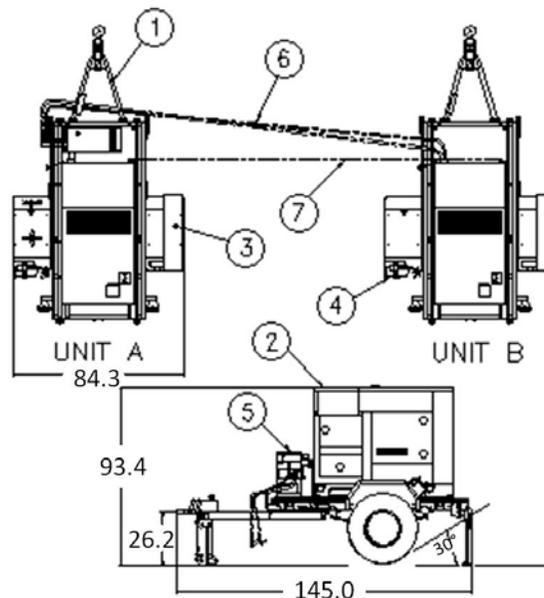


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	2	97403-13229E9632
2	MEP-814A	2	6115-01-274-7393
3	Accessory box	2	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A)	1	97403-13229E5795-1
6	Cable assembly (unit B)	1	97403-13229E5674
7	Paralleling cable assembly	2	30554-88-22209

FIGURE C-29 PP-AN/MJQ-39 - TQG Power Plant, 15 kW, 400 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-48	6115-01-540-8433	P01012	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 91 each	611 each	Unit A: 3570 Unit B: 3570	Unit A: 3470 Unit B: 3470
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	NOT PROCURABLE	97403-13228E1613	TA-13230E7015

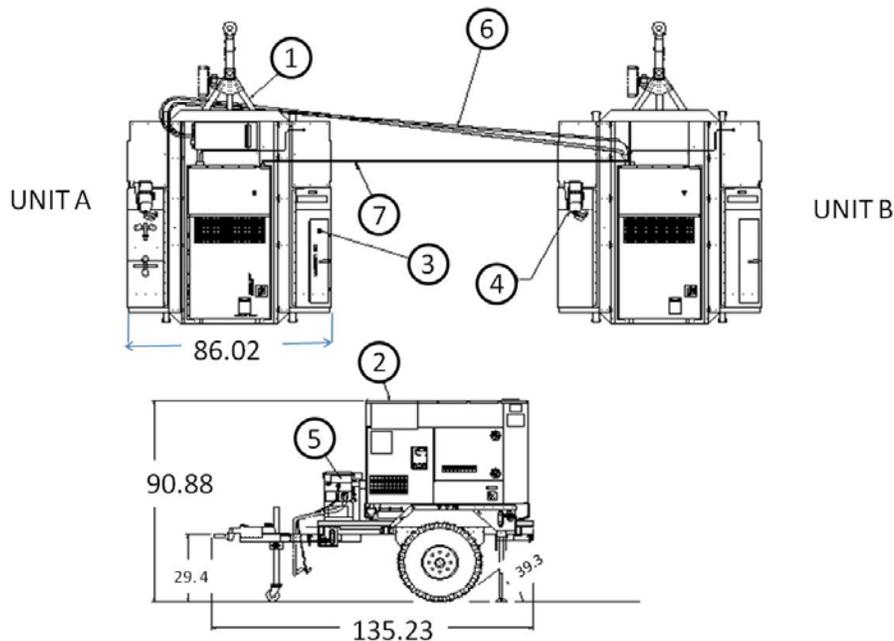


FIND	COMPONENT	QTY	IDENTIFIER
1	M116A3 Trailer AN/MJQ-48	2	97403-13230E6829
2	MEP-804A	2	6115-01-274-7388
3	Accessory box	2	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A)	1	97403-13229E5795-1
6	Cable assembly (unit B)	1	97403-13229E5674
7	Paralleling cable assembly	2	30554-88-22209

FIGURE C-30 PP-AN/MJQ-48 - TQG Power Plant, 15 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-48A	6115-01-540-9465	P01012	R62700
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
135 x 86 x 91 each	611 each	Unit A: 3570, Unit B: 3570	Unit A: 3470, Unit B: 3470
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
TM 9-6115-661-13&P	NOT PROCURABLE	97403-13228E1614	TA-13230E7016



FIND	COMPONENT	QTY	IDENTIFIER
1	Light Tactical Trailer (LTT) AN/MJQ-48A	2	97403-13230E6565
2	MEP-804A	2	6115-01-274-7388
3	Accessory box	2	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A)	1	97403-13229E5795-1
6	Cable assembly (unit B)	1	97403-13229E5674
7	Paralleling cable assembly	2	30554-88-22209

FIGURE C-31 PP-AN/MJQ-48A - TQG Power Plant, 15 kW, 50/60 Hz

MIL-STD-633F

C.3.1.15 Military Standard Generator Set, DED, 15 kW.

TABLE C-XIII Characteristic Data for MEP-004A and MEP-113A

Identification Data						
Model	MEP-004A			MEP-113A		
Description	Generator Set, DED, 15 kW, 50/60 Hz			Generator Set, DED, 15 kW, 400 Hz		
NSN	6115-00-118-1241			6115-00-118-1244		
LIN	J35835			J36006		
SSN	M549			M526		
Specification	NOT PROCURABLE					
Trailer Configuration	PU-405A/M; FIGURE C-33			PU-732/M; FIGURE C-34 AN/MJQ-15; FIGURE C-35		
Physical Characteristics						
Dimensions LWH (in)	69.8 x 35.8 x 54.6					
Ship Cube (ft ³)	75					
Wet Weight (lbs)	2450			2500		
Engine	4 cylinder Diesel, 41 hp@ 1500/1800 RPM (50/60 Hz), liquid cooled, 24 Volt starter.			4 cylinder Diesel, 45 hp @ 2000 RPM (400 Hz) liquid cooled, 24 Volt starter		
Instrumentation	Hourmeter, voltmeter, frequency meter, ammeter, wattmeter, oil pressure, battery charge, fault indicating system, water temp, fuel level.					
Fuels	Diesel: DL-1, DL-2 and Jet fuel: JP-8, Jet A-1.					
Fuel Tank Capacity (Gal)	15					
Performance Characteristics						
Power Rating	15kW, 60Hz (12.5kW, 50Hz) @ 0.8 pf from -25°F (-65°F w/winterization kit) to 125°F/MSL; 107°F/ 5000 ft.					
Environmental Capability	-25°F to 125°F, rain, humidity, altitude, sand/dust, transportation, -65°F cold storage, salt spray, fungus.					
Protective Devices	Overload, over voltage, short circuit, reverse power, low oil pressure, high temp., low fuel, overspeed.					
Fuel consumption	1.5 gal/hour @ rated load					
Human Factors	MIL-STD-1474					
Noise	80 dBA @ 25 feet					
Reliability (MTBF)	670 hr			370 hr (specified)		
Electrical Characteristics						
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary alternator.					
EMI	Suppressed to MIL-STD-461 limits.					
EMP	Not protected					
Motor load	40% dip, 5 sec recovery			25 % dip, 0.7sec recovery		
Voltage Connection	120/208 V, 3 phase, 4 wire			240/416 V, 3 phase, 4 wire		
Frequency	50 Hz	60 Hz	400 Hz	50 Hz	60 Hz	400 Hz
Voltage adj. Range	190 – 213 V	380 – 426 V	197 – 240 V	395 – 480 V	197 – 229 V	395 – 458 V
Freq. adj. Range	±2 Hz		±10 Hz	±2 Hz		±10 Hz
Electrical Performance						
Electric Power Quality	MEP-004A			MEP-113A		
	Frequency	AC Voltage		Frequency	AC Voltage	
Regulation	2-3% (adj)	3%		0.25%	1%	
Short term steady state stability (30 sec)	2% bandwidth	2% bandwidth		0.5% bandwidth	1% bandwidth	
Long term steady state stability (4 hr)	3% bandwidth	4% bandwidth		1% bandwidth	2% bandwidth	
Application of rated load	transient	3%	20%	1.5%	12%	
	recovery time	3 sec	3 sec	1 sec	0.5 sec	
Rejection of rated load	transient	4%	20%	1.5%	12%	
	recovery time	3 sec	3 sec	1 sec	0.5 sec	
Max waveform deviation factor		5%			5%	
Individual waveform harmonic		2%			2%	

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TABLE C-XIII Characteristic Data for MEP-004A and MEP-113A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Fuel burning winterization kit	6115-00-463-9083	45	Internal
Electrical winterization kit	6115-00-463-9085	40	internal
Aux fuel burning winterization kit	6115-00-463-9098	350	41 x 40 x 26 (Aux)
Aux electrical winterization kit	6115-00-463-9099	260	36 x 27 x 19 (Aux)
Remote control box	6115-00-420-8490	8	internal
Load bank	6115-00-291-9201	104	L+9
Wheel mounting kit	6115-00-463-9094	564	L+8, W+32, H+9
Auto load transfer panel 60 Hz	6115-00-471-7932	825	44 x 19 x 42 (Aux)
Paralleling cable	6140-00-197-4934	4	negligible
Precise relay assembly	6115-00-368-8202		internal
Spark arrester kit	2990-01-032-0756	7.5	L+12
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-464-12	TO35C2-3-445-1	TM 07523A-12	NAVFAC P-8-624-12
TM5-6115-464-34	TO35C2-3-445-2	TM 07523A-34	NAVFAC P-8-624-34
TM5-6115-464-24P	TO35C2-3-445-4	SL-4-07523A	NAVFAC P-8-624-24P
LO-5-6115-464-12			



MEP-004A/MEP-113A

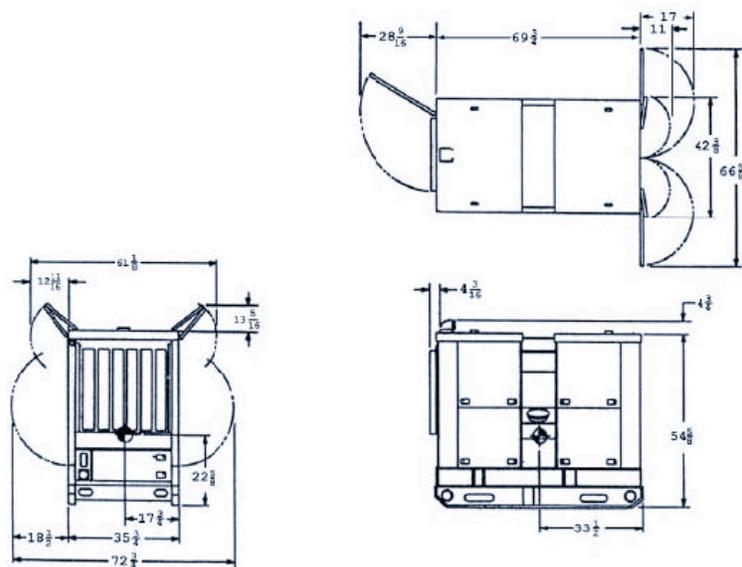
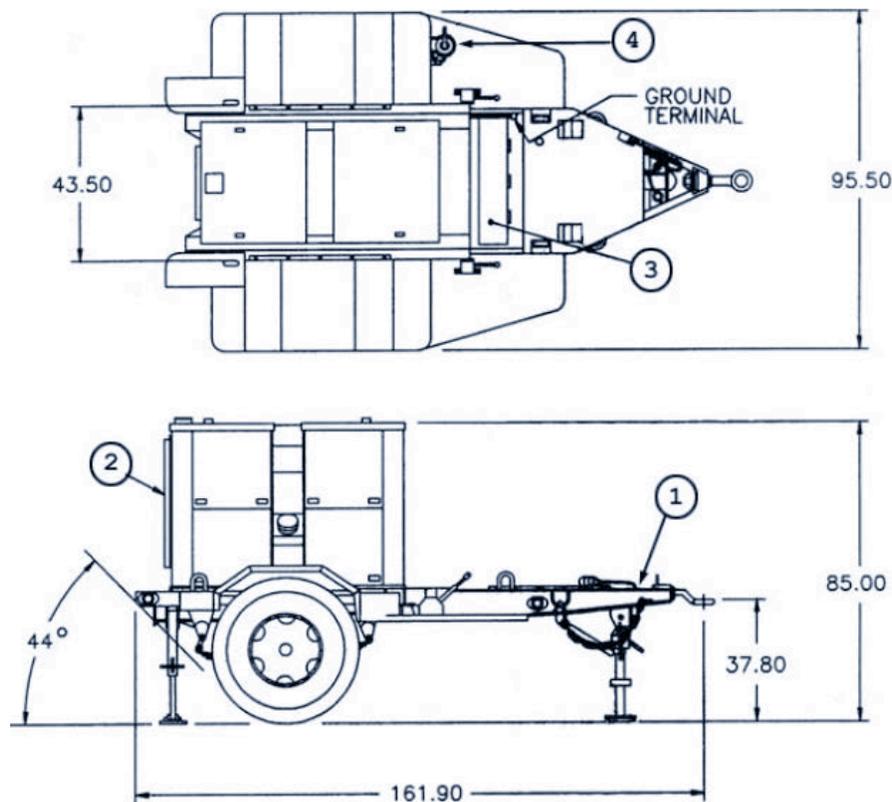


FIGURE C-32 Mil Std Generator Set, DED, 15 kW

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-405A/M	6115-00-394-9577	J35492	M500
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
161.9x 95.5 x 85.0	800	5970	5860
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7154	TA-13220E6322

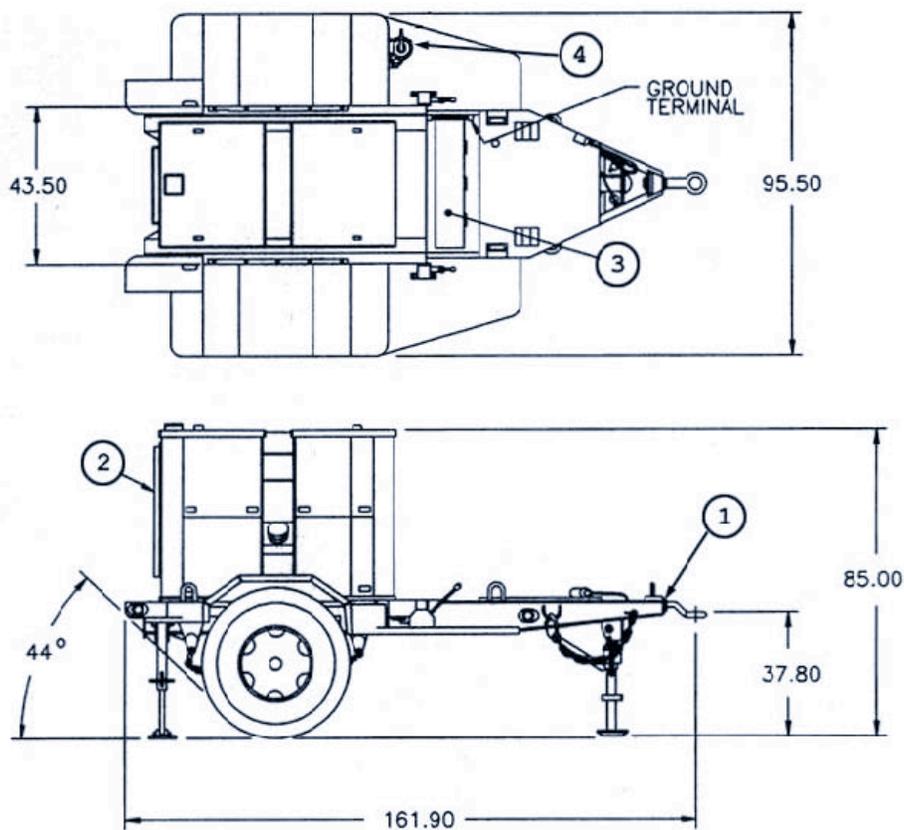


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified Trailer, M200A1	1	97403-13214E1257
2	MEP-004A	1	6115-00-118-1241
3	Accessory box	1	97403-13226E7737
4	Fire extinguisher, 5 lb, A-A-1106	1	4210-00-270-4512

FIGURE C-33 PU-405A/M - Power Unit, DED, 15 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-732/M	6115-00-260-3082	G36074	M521
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
161.9 x 95.5 x 85.0	800	6080	5900
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7154	TA-13220E6645

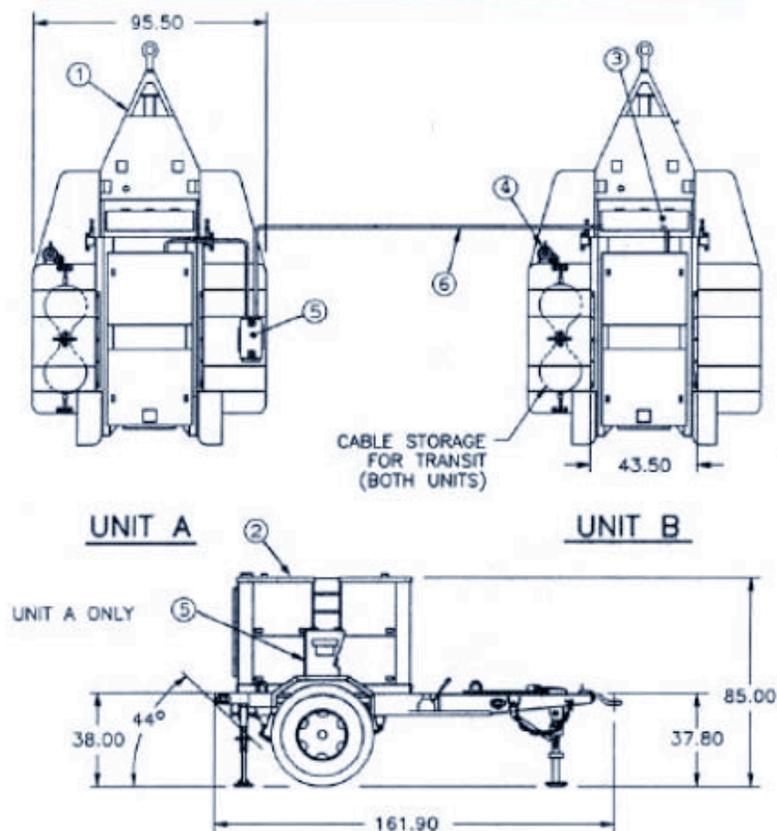


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified Trailer, M200A1	1	97403-13214E1257
2	MEP-113A	1	6115-00-118-1244
3	Accessory box	1	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-34 PU-732/M - Power Unit, DED, 15 kW, 400 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-15	6115-00-400-7591	P28075	M563
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
161.9x95.5x85.0 (each of two units)	800 (each unit)	Unit A: 6180 Unit B: 6155	Unit A: 6020 Unit B: 6000
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7154	TA-13220E8042



FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 ton flatbed trailer, M200A1	2	97403-13214E1257
2	MEP-113A	2	6115-00-118-1244
3	Accessory box	2	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A), 97403-13220E6400 (old)	1	97403-13229E5795
6	Cable assembly	1	97403-13220E6427

FIGURE C-35 PP-AN/MJQ-15 - Power Plant, DED, 15 kW, 400 Hz

MIL-STD-633F

C.3.1.16 TQG Generator Set, DED, 30 kW

TABLE C-XIV Characteristic Data for MEP-805A and MEP-815A

Identification Data						
Model	MEP-805A			MEP-815A		
Description	Gen Set, 30kW, DED, 50/60 Hz			Gen Set, 30kW, DED, 400 Hz		
NSN	6115-01-274-7389			6115-01-274-7394		
LIN	G74575			G74643		
SSN	M532			M50100		
Specification	NOT PROCURABLE (MIL-DTL-53133/7)			NOT PROCURABLE (MIL-DTL-53133/8)		
Trailer Configuration	PU-803; FIGURE C-37 PP-AN/MJQ-40; FIGURE C-39			PU-804; FIGURE C-38		
Physical Characteristics						
Dimensions LWH (in)	79.3 x 35.3 x 54.1					
Ship Cube (ft ³)	88					
Wet Weight (lbs)	3006			3015		
Engine	John Deer -Model: 4039T 4 cyl Turbo Diesel, 92 hp@1800 RPM, 24VDC starter, liquid cooled.					
Instrumentation	On/off switch, Hour, volt, frequency, oil pressure, coolant temperature.					
Fuels	Diesel DL-1, DL-2 and jet fuel JP-8, Jet A-1.					
Fuel Tank Capacity (Gal)	23					
Performance Characteristics						
Power Rating	30kW, 0.8 power factor @ 4000ft/120°F. Derate: 3.5%/1000 ft (4000 - 8000 ft). Max Power: 110% of rated power.					
Environmental Capability	-25°F - 120°F, rain, humidity, altitude, sand/dust, transportation, cold storage: -60°F, salt spray, fungus.					
Protective Devices	Automatic shut down with emergency bypass for low oil pressure, coolant high temperature, overspeed, and overvoltage.					
Fuel consumption	2.43 gal/hour			2.69 gal/hour		
Human Factors	MIL-STD-1474.					
Noise	70 dBA @ 7 meters (23 feet).					
Reliability (MTBF)	600 hr MTBOMF			510 hr MTBOMF		
Maintenance Ratio	less than 0.05					
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Marathon Electric synchronous rotating field generator.					
EMI	Suppressed to MIL-STD-461 limits.					
EMP	HAEMP IAW MIL-STD-2169.					
Motor load	30% (25% - 400) dip /0.7 sec to 95% int V					
Voltage Connection	120/208 V, 3 phase, 4 wire			240/416 V, 3 phase, 4 wire		
Frequency	50 Hz	60 Hz	400 Hz	50 Hz	60 Hz	400 Hz
Voltage adj. Range	190-213 V	197-240 V	197-229 V	380-426 V	395-480 V	395-458 V
Freq. adj. Range	± 2 Hz for 50/60 Hz			390-420 Hz for 400 Hz		
Electrical Performance						
Electric Power Quality	MEP-805A			MEP-815A		
	Frequency	AC Voltage		Frequency	AC Voltage	
Regulation	0.25%	1%		0.25%	1%	
Voltage modulation		1%			1%	
Short term steady state stability (30 sec)	0.5% bandwidth	1% bandwidth		0.5% bandwidth	1% bandwidth	
Long term steady state stability (4 hr)	1% bandwidth	1% bandwidth		1% bandwidth	1% bandwidth	
Application of rated load	transient	4% under	15% dip	1.5% under	15% dip	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Rejection of rated load	transient	4% over	15% rise	1.5% over	15% rise	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Max waveform deviation factor		5%			5%	
Individual waveform harmonic		2%			2%	

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TABLE C-XIV Characteristic Data for MEP-805A and MEP-815A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
None			
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-644-10	TO 35C2-3-446-11	TM 09249A/0924A-10/2	
TM 9-6115-644-24	TO 35C2-3-446-12	TM 09249A/09246A-24/2	
LO 9-6115-644-12			
TB 9-6115-644-24			

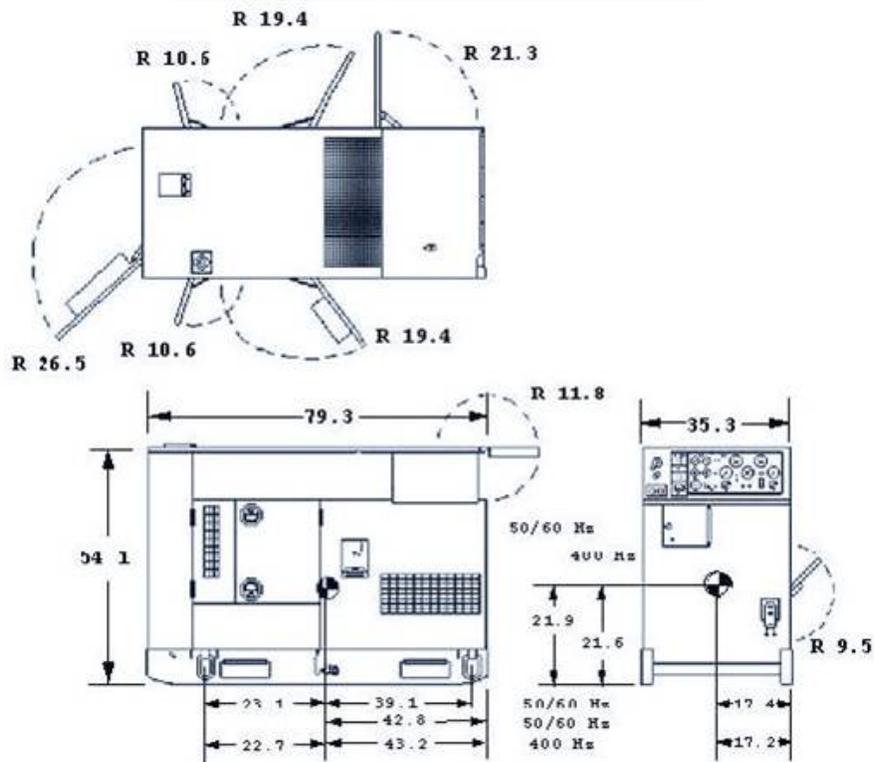
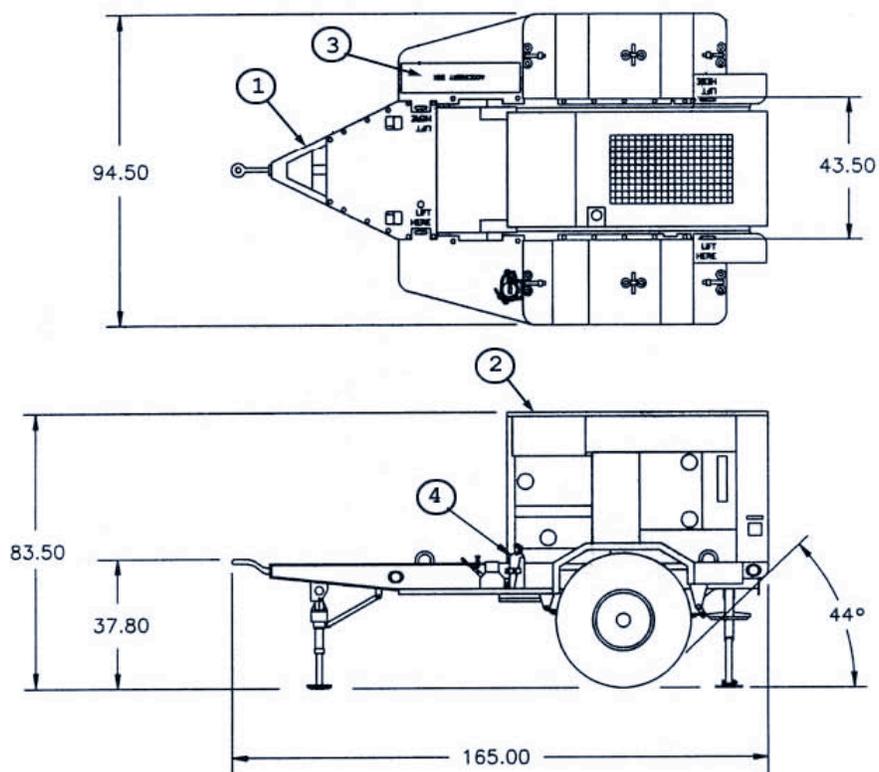


FIGURE C-36 TQG Generator Set, DED, 30 kW

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-803	6115-01-317-2136	G35851	M54300
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165.0 x 94.5 x 83.5	770	5900	6380
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13228E1615	TA-13229E5745

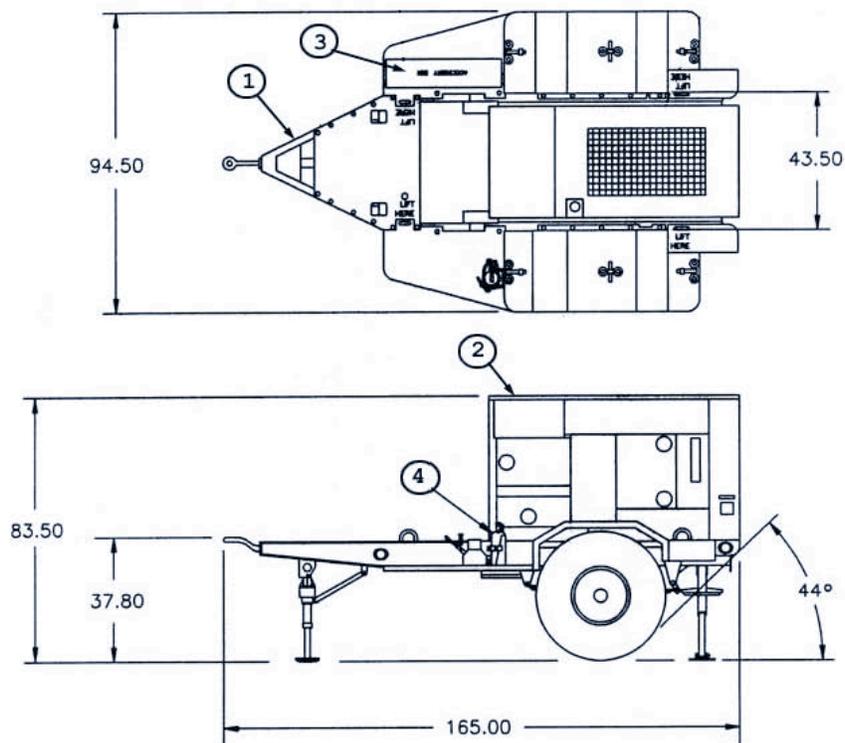


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13214E1257
2	MEP-805A	1	6115-01-274-7389
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-37 PU-803 - TQG Power Unit, DED, 30kW, 50/60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PU-804	6115-01-317-2135	G35919	M59500
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165.0 x 94.5 x 83.5	770	5730	5930
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13228E1615	TA-13229E5750

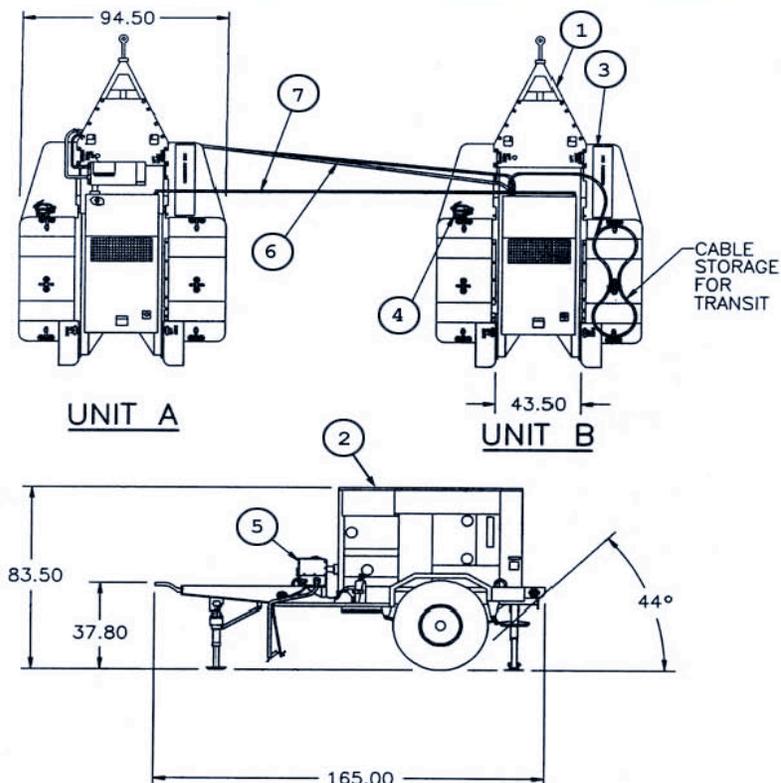


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13214E1257
2	MEP-815A	1	6115-01-274-7394
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-38 PU-804 - TQG Power Unit, DED, 30kW, 400 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
AN/MJQ-40	6115-01-299-6033	P42126	M51900
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165.0x94.5x83.5 (each)	770 (2x)	Unit A: 5700 Unit B: 5740	Unit A: 6700 Unit B: 6740
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13228E1615	TA-13229E5700



FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	2	97403-13214E1257
2	MEP-805A	2	6115-01-274-7389
3	Accessory box	2	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A)	1	97403-13229E5795
6	Cable assembly (unit B)	1	97403-13229E5738
7	Paralleling cable assembly	2	30554-88-22209

FIGURE C-39 PP-AN/MJQ-40 - TQG Power Plant, DED, 30kW, 50/60 Hz

MIL-STD-633F

C.3.1.17 Military Standard Generator Set, DED, 30 kW, 50/60 kW

TABLE C-XV Characteristic Data for MEP-104A

Identification Data				
Model	MEP-104A			
Description	Generator Set, DED, Tactical, Precise, 30 kW, 50/60 Hz			
NSN	6115-00-118-1247			
LIN				
SSN				
Specification	NOT PROCURABLE (MIL-G-52884/4)			
Configuration	Fully housed. Mounted on skid base. Lifting and tie-down attachments provided. Fork lift provision.			
Physical Characteristics				
Dimensions LWH (in)				
Ship Cube (ft ³)				
Wet Weight	2850			
Engine	Diesel. Std: MIL-STD-1410.Horsepower: 57 1800 RPM. No. of cyl: 6. Cycle 4. Liquid cooled. 24 VDC electric start. Operating speed: 50 Hz: 1500 RPM, 60 Hz: 1800 RPM			
Instrumentation	Voltmeter, frequency meter, ammeter, hourmeter, wattmeter (%load), oil press. gage, battery charging ammeter(%current), fault indicating system, coolant temp. indicator & fuel level.			
Fuels	Primary: VV-F-800: Diesel Fuel Oil, types DF-1, DF-2 and DF-A. Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.			
Fuel Tank Capacity (Gal)	26 (Approx 8 hours at rated load)			
Performance Characteristics				
Power Rating	30kW, 60Hz		25kW, 50Hz	
	Sea level	5000 feet	Sea level:	5000 feet:
	-25°F(-31.7°C) to +125°F(+51.7°C)	-25°F(-31.7°C) to +107°F(+41.7°C)	-25°F(-31.7°C) to +125°F(+51.7°C)	-25°F(-31.7°C) to +107°F(+41.7°C)
	Winterization system extends lower temp. limit to -65°F(-53.9°C).			
Environmental Capability	Fungus and moisture treatment.			
Protective Devices	Short circuit protection. Overvoltage protection. Overload protection. Reverse power protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.			
Fuel consumption	3 gal/hour at rated load			
Human Factors				
Noise	82 dBA @ 25 feet			
Reliability (MTBF)	370 hr (specified)			
Electrical Characteristics				
Basic Design	Drip proof generator enclosure. Capable of parallel operation. Solid state voltage regulator. Brushless rotary exciter			
EMI	Suppression to MIL-STD-461 limits.			
EMP				
Frequency	50 Hz		60 Hz	
Voltage Connection	120/208V,3 ph,4 Wire.	240/416V,3 ph,4 wire.	120/208V,3 ph,4 Wire.	240/416V,3 ph,4 wire.
Voltage adj. Range	190 – 213 V	380 – 426 V	197 – 240 V	395 – 480 V
Freq. adj. Range	48 - 52 Hz		58 - 62 Hz	
Electrical Performance				
Electric Power Quality	Frequency		AC Voltage	
Regulation	0.25%		1%	
Short term steady state stability (30 sec)	0.5% bandwidth		1% bandwidth	
Long term steady state stability (4 hr)	1% bandwidth		2% bandwidth	
Application of rated load	transient	1.5% undershoot	15% dip	
	recovery time	1 sec	0.5 sec	
Rejection of rated load	transient	1.5% overshoot	15% rise	
	recovery time	1 sec	0.5 sec	
Max waveform deviation factor			5%	
Individual waveform harmonic			2%	

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TABLE C-XV Characteristic Data for MEP-104A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Wntzn Kit (Fuel burning)	6115-00-463-9083	45	Int
Wntzn Kit (Electric)	6115-00-463-9085	110	Int
Wntzn Kit, Aux, Fuel burning	6115-00-463-9098	350	Aux: (41x40x26)
Wntzn Kit, Aux, Elect.	6115-00-463-9099	260	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8	Int
Load Bank	6115-00-463-9088		Ext: L+9
Wheel Mounting Kit	6115-00-463-9094	564	Ext: L+8,W+32,H+9
Panel, Auto, Load Transfer,60 Hz	6115-00-477-7932	825	Aux: (44x19x42)
Spark Arrester Kit	2990-01-032-0756	7.5	Ext: L+12
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 5-6115-465-12	TO 35C2-3-446-1	TM-06858B/065859D-12	NAVFAC P-8-625-12
TM 5-6115-465-34	TO 35C2-3-446-2	TM-06958B/06859D-34	NAVFAC P-8-625-34
TM 5-6115-465-24P	TO 35C2-3-446-4	SL-4-06858B/06859p	NAVFAC P-8-625-24P
LO 5-6115-465-12		LO-06858A-06859A-12	

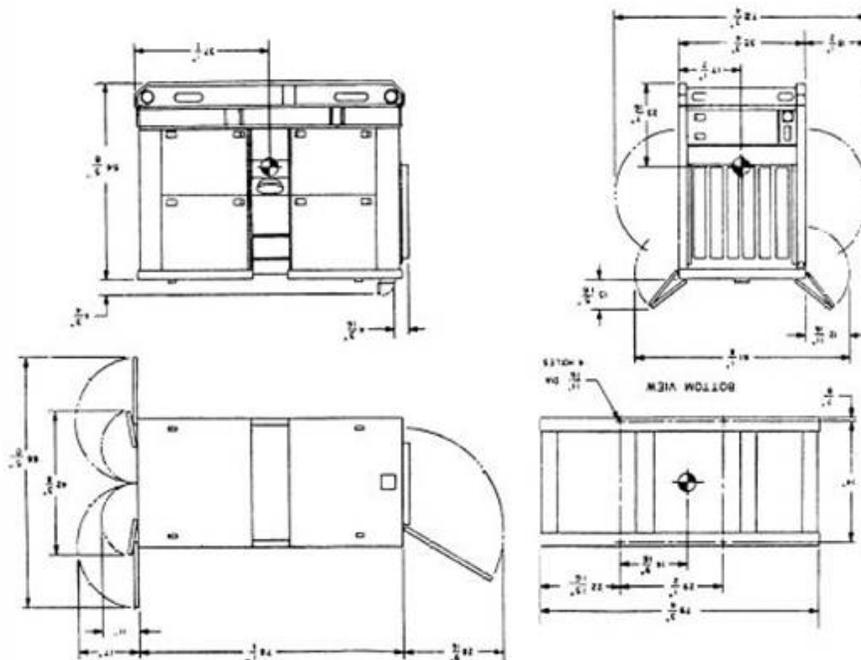


FIGURE C-40 Mil Std Generator Set, DED, 30 kW, 50/60 Hz

MIL-STD-633F

C.3.1.18 Military Standard Generator Set, DED, 30 kW

TABLE C-XVI Characteristic Data for MEP-005A and MEP-114A

Identification Data						
Model	MEP-005A			MEP-114A		
Description	Generator Set, DED, 30 kW, 50/60 Hz			Generator Set, DED, 30 kW, 400 Hz		
NSN	6115-00-118-1240			6115-00-118-1248		
LIN	J36109			J36725		
SSN	M532			M501		
Specification	NOT PROCURABLE					
Trailer Configuration	PU-406B/M, FIGURE C-42 ; AN/MJQ-10A, FIGURE C-44			PU-760/M, FIGURE C-43		
Physical Characteristics						
Dimensions LWH (in)	79.3 x 35.8 x 54.6					
Ship Cube (ft ³)	90					
Weight (lbs)	2850			3000		
Engine	6 cylinder Diesel, 57 hp @ 1800 RPM (60 Hz), liquid cooled, 24 Volt starter.			6 cylinder Diesel, 64 hp @ 2000 RPM (400 Hz), liquid cooled, 24 Volt starter		
Instrumentation	Hourmeter, voltmeter, frequency meter, ammeter, wattmeter, oil pressure gage, battery charging ammeter, fault indicating system, temperature & fuel level.					
Fuels	Diesel: DL-1, DL-2 and Jet fuel: JP-8, Jet A-1.					
Fuel Tank Capacity (Gal)	26					
Performance Characteristics						
Power Rating	30 kW, 60/400 Hz (25 kW, 50 Hz) @ 0.8 pf from -25°F (-65°F with winterization kit) to 125°F/MSL, 107°F/5000 ft.					
Environmental Capability	-25°F(-65°F with winterization kit) to 125°F, rain, humidity, altitude, sand/dust, transportation, cold storage, salt spray, fungus.					
Protective Devices	Overload, over voltage, short circuit, reverse power, low oil pressure, high temperature, low fuel, overspeed.					
Fuel consumption	3 gal/hour @ rated load					
Human Factors	MIL-STD-1474. Operable in arctic and NBC clothing.					
Noise	80 dBA @ 25 feet.					
Reliability (MTBF)	670 hr (spec)			370 hr (spec)		
Maintenance Ratio						
Electrical Characteristics						
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary alternator.					
EMI	Suppressed to MIL-STD-461 limits.					
EMP	None					
Motor load	40% dip /5 sec recovery			25% dip/0.7 sec recovery		
Voltage Connection	120/208 V, 3 phase, 4 wire			240/416 V, 3 phase, 4 wire.		
Operating Frequency	50 Hz	60 Hz	400 Hz	50 Hz	60 Hz	400 Hz
Voltage adj. Range	190 - 213 V	197 - 240 V	197 - 229 V	380 - 426 V	395 - 480 V	395 - 458 V
Electrical Performance						
Electric Power Quality	MEP-005A			MEP-114A		
	Frequency	AC Voltage		Frequency	AC Voltage	
Regulation	2-3% (adj)	3%		0.25%	1%	
Voltage modulation						
Short term steady state stability (30 sec)	2%	2%		0.5%	1%	
Long term steady state stability (4 hr)	3%	4%		1%	2%	
Application of rated load	transient	3%	20%	1.5%	12%	
	recovery time	3 sec	3 sec	1 sec	0.5 sec	
Rejection of rated load	transient	4%	20%	1.5%	12%	
	recovery time	3 sec	3 sec	1 sec	0.5 sec	
Max waveform deviation factor		5%			5%	
Individual waveform harmonic		2%			2%	

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TABLE C-XVI Characteristic Data for MEP-005A and MEP-114A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Fuel burning winterization kit	6115-00-463-9083	45	internal
Electrical winterization kit	6115-00-463-9085	40	internal
Aux fuel burning winterization kit	6115-00-463-9098	350	41 x 40 x 26 (Aux)
Aux electrical winterization kit	6115-00-463-9099	260	36 x 27 x 19 (Aux)
Remote control box	6115-00-420-8490	8	internal
Load bank	6115-00-463-9088		L+9
Wheel mounting kit	6115-00-463-9094	564	L+8 W+32 H+9
Auto load transfer panel 60 Hz	6115-00-471-7932	825	44 x 19 x 42 (Aux)
Paralleling cable	6140-00-197-4934	4	negligible
Precise relay assembly	6115-00-368-8202		internal
Spark arrester kit	2990-01-032-0756	7.5	L+12
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-465-12	TO35C2-3-446-1	TM 06858B/06859D-12	NAVFAC P-8-625-12
TM5-6115-465-34	TO35C2-3-446-2	TM 06858B/06859D-34	NAVFAC P-8-625-34
TM5-6115-465-24P	TO35C2-3-446-4	SL-4-06858B/06859P	NAVFAC P-8-625-24P
LO-5-6115-465-12		LO-06858A-06859A-12	



MEP-005A or MEP-114A

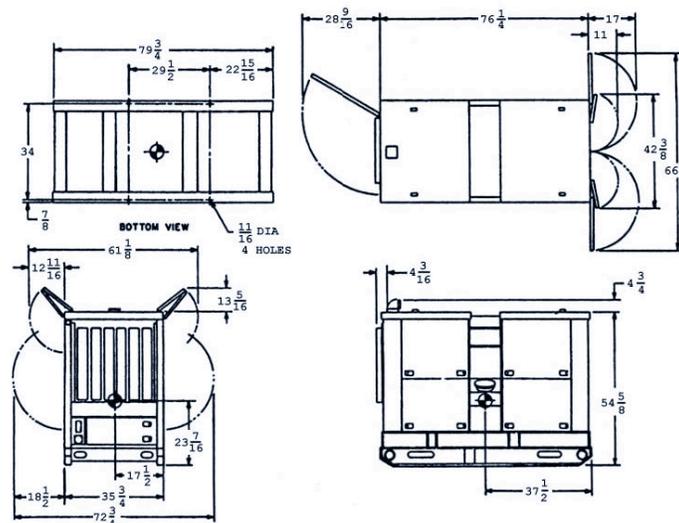
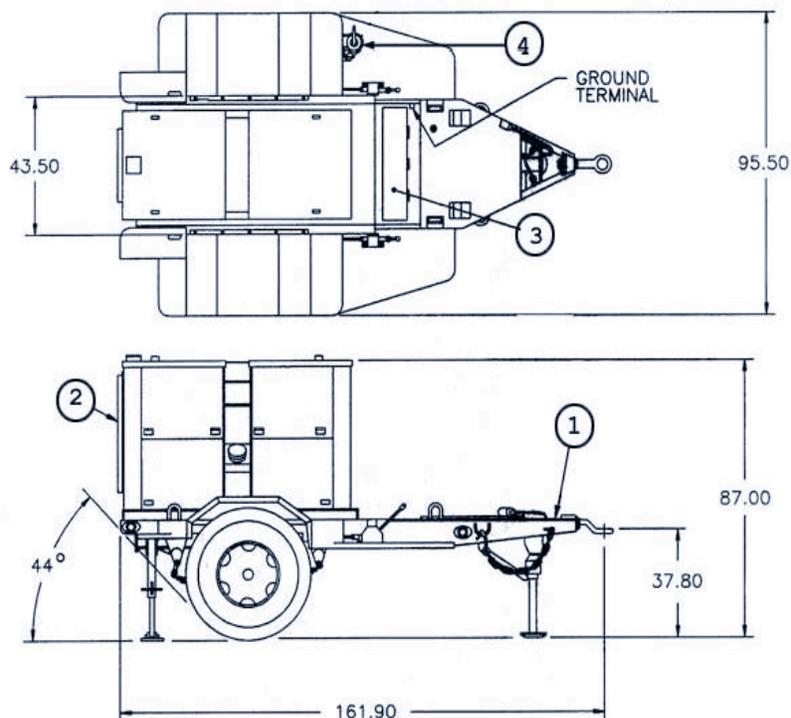


FIGURE C-41 Mil Std Generator Set, DED, 30kW

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-406B/M	6115-00-394-9576	J36383	M543
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
161.9 x 95.5 x 87.0	818	6530	6380
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7492	TA-13220E6325

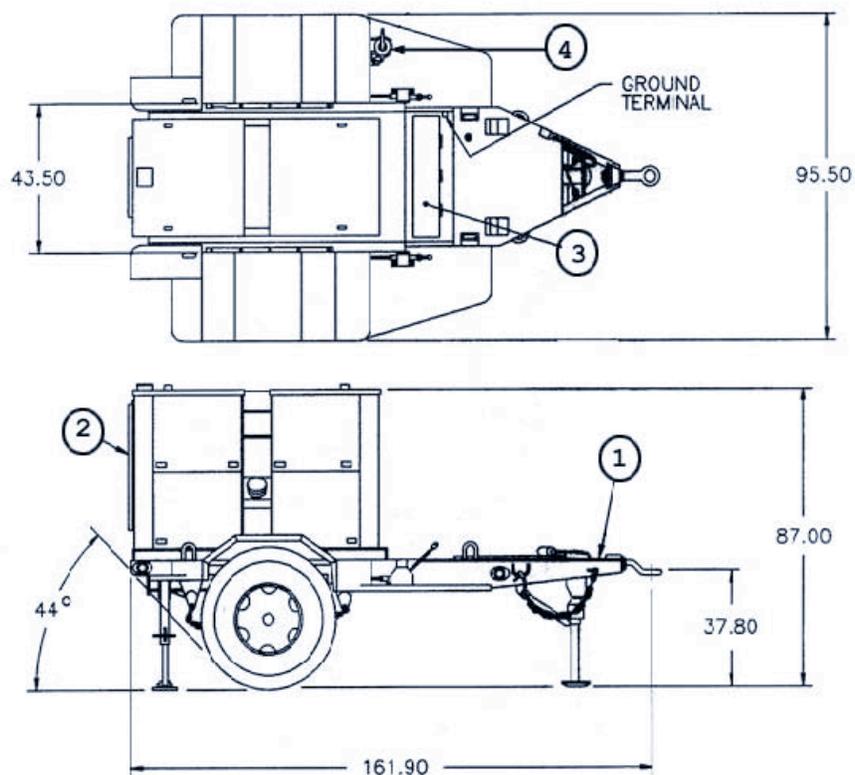


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified Trailer, M200A1	1	97403-13214E1257
2	MEP-005A	1	6115-00-118-1240
3	Accessory box	1	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-42 PU-406B/M – Power Unit, DED, 30 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-760/M	6115-00-394-9581	G53871	M595
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
161.9 x 95.5 x 87.0	818	6680	5380
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7492	TA-13220E6341

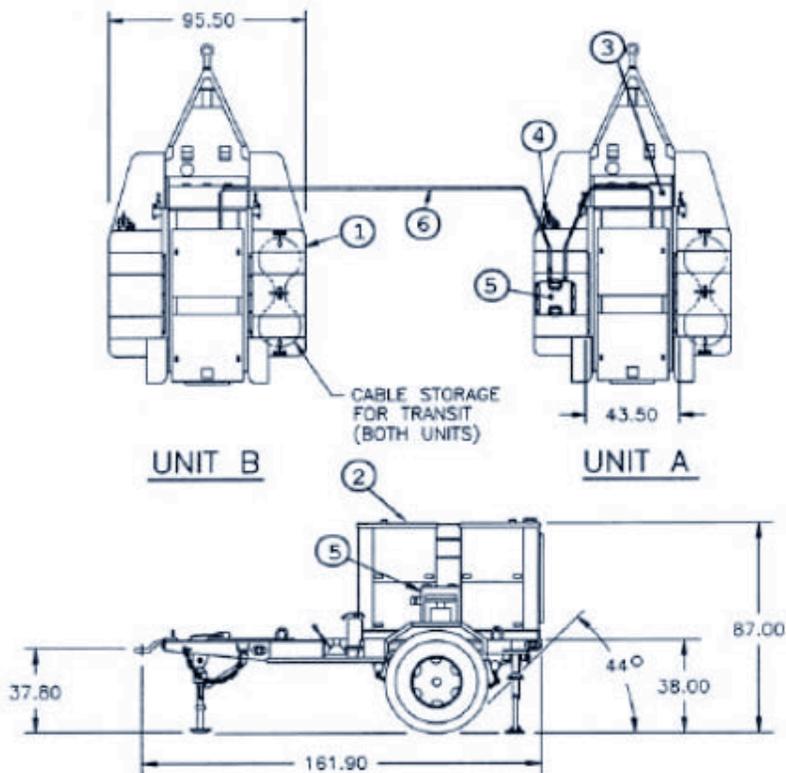


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified Trailer, M200A1	1	97403-13214E1257
2	MEP-114A	1	6115-00-118-1248
3	Accessory box	1	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-43 PU-760/M – Power Unit, DED, 30 kW, 400 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-10A	6115-00-394-9582	P27819	M519
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
161.9x95.5x87.0 (each)	818 (each unit)	Unit A: 6630 Unit B: 6620	Unit A: 6480 Unit B: 6420
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7492	TA-13220E6335



FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 ton flatbed trailer, M200A1	2	97403-13214E1257
2	MEP-005A	2	6115-00-118-1240
3	Accessory box	2	97403-13226E7737
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A), 97403-13229E6780 (old)	1	97403-13229E5795
6	Cable assembly	1	97403-13220E7718

FIGURE C-44 PP-AN/MJQ-10A - Power Plant, DED, 30 kW, 50/60 Hz

MIL-STD-633F

C.3.1.19 TQG Generator Set, DED, 60kW

TABLE C-XVII Characteristic Data for MEP-806A and MEP-816A

Identification Data						
Model	MEP-806A			MEP-816A		
Description	Generator Set, 60 kW, DED, 50/60 Hz			Generator Set, 60 kW, DED, 400 Hz		
NSN	6115-01-274-7390			6115-01-274-7395		
LIN	G12034			G18052		
SSN	M53400			M53100		
Specification	NOT PROCURABLE (MIL-DTL-53133/9)			NOT PROCURABLE (MIL-DTL-53133/10)		
Trailer Configuration	PU-805, FIGURE C-46 ; PP-AN/MJQ-41, FIGURE C-48 ; PP-AN/MJQ-1612, FIGURE C-49			PU-806 FIGURE C-47 PP-AN/MJQ-1610, FIGURE C-50		
Physical Characteristics						
Dimensions LWH (in)	86.3 x 35.3 x 58.2					
Ship Cube (ft ³)	103					
Wet Weight (lbs)	4063			4153		
Engine	John Deer Model 6059T 6 cyl Turbo Diesel, 134 horsepower @ 1800 RPM, 24 VDC starter, liquid cooled, electronic governor.					
Instrumentation	On/off switch, Hour, volt, frequency, oil pressure, coolant temperature.					
Fuels	Diesel DL-1, DL-2 and jet fuel JP-8, Jet A-1.					
Fuel Tank Capacity (Gal)	43					
Performance Characteristics						
Power Rating	30 kW, 0.8 power factor @ 4000 ft/120 °F. Derate: 3.5%/1000 ft (4000 - 8000 ft). Max Power: 110% of rated power.					
Environmental Capability	-25°F - 125°F, rain, humidity, altitude, sand/dust, transp., cold storage: -60°F, salt spray, fungus.					
Protective Devices	Automatic shut down with emergency bypass for low oil pressure, coolant high temp., overspeed, and overvoltage.					
Fuel consumption	4.51 gal/hour			4.99 gal/hour		
Human Factors	MIL-STD-1474					
Noise	70 dBA @ 7 meters (23 feet)					
Reliability (MTBF)	488 hr MTBOMF			361 hr MTBOMF		
Maintenance Ratio	less than 0.05					
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Marathon/Lima brushless generator.					
EMI	Suppressed to MIL-STD-461 limits.					
EMP	HAEMP IAW MIL-STD-2169.					
Motor load	30% (25%- 400) dip;0.7 sec to 95% int V					
Voltage Connection	120/208 V, 3 phase, 4 wire			240/416 V, 3 phase, 4 wire		
Frequency	50 Hz	60 Hz	400 Hz	50 Hz	60 Hz	400 Hz
Voltage adj. Range	190-213 V	197-240 V	197-229 V	380-426 V	395-480 V	395-458 V
Freq. adj. Range	± 2 Hz for 50/60Hz			390-420 Hz for 400Hz		
Electrical Performance						
Electric Power Quality	MEP-805A			MEP-815A		
	Frequency	AC Voltage		Frequency	AC Voltage	
Regulation	0.25%	1%		0.25%	1%	
Voltage modulation		1%			1%	
Short term steady state stability (30 sec)	0.5% bandwidth	1% bandwidth		0.5% bandwidth	1% bandwidth	
Long term steady state stability (4 hr)	1% bandwidth	2% bandwidth		1% bandwidth	2% bandwidth	
Application of rated load	transient	4% under	15% dip	1.5% under	15% dip	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Rejection of rated load	transient	4% over	15% rise	1.5% over	15% rise	
	recovery time	2 sec	0.5 sec	1 sec	0.5 sec	
Max waveform deviation factor		5%			5%	
Individual waveform harmonic		2%			2%	

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TABLE C-XVII Characteristic Data for MEP-806A and MEP-816A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
None			
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-645-10	TO 35C2-3-444-11	09244A/09245A-10/2	
TM 9-6115-645-24	TO 35C2-3-444-12	09244A/09245A-24/2	
LO 9-6115-645-12			
TB 9-6115-645-24			

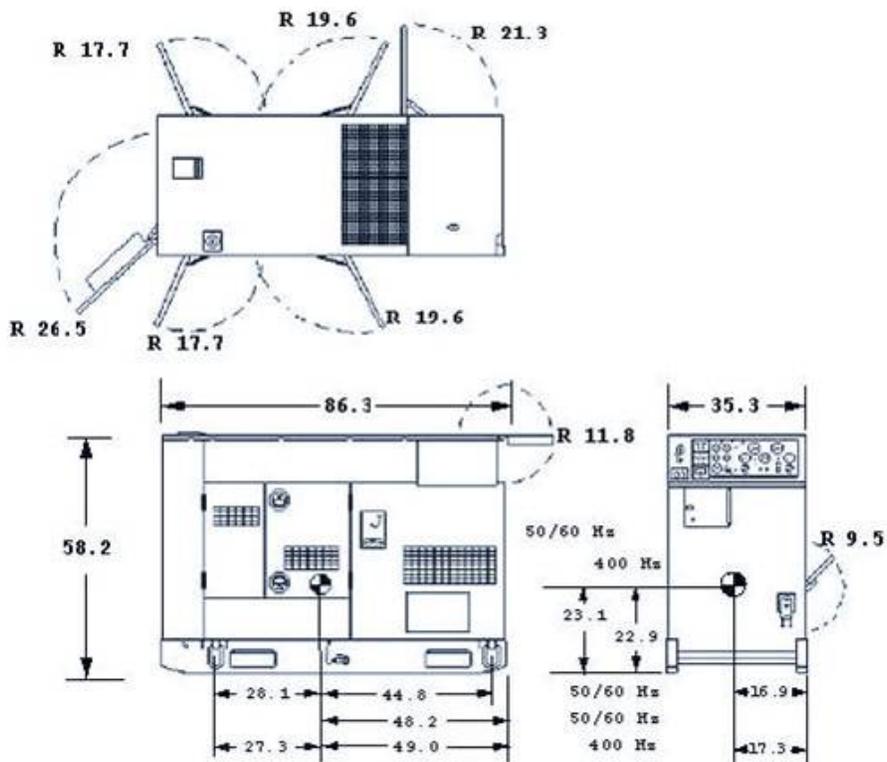
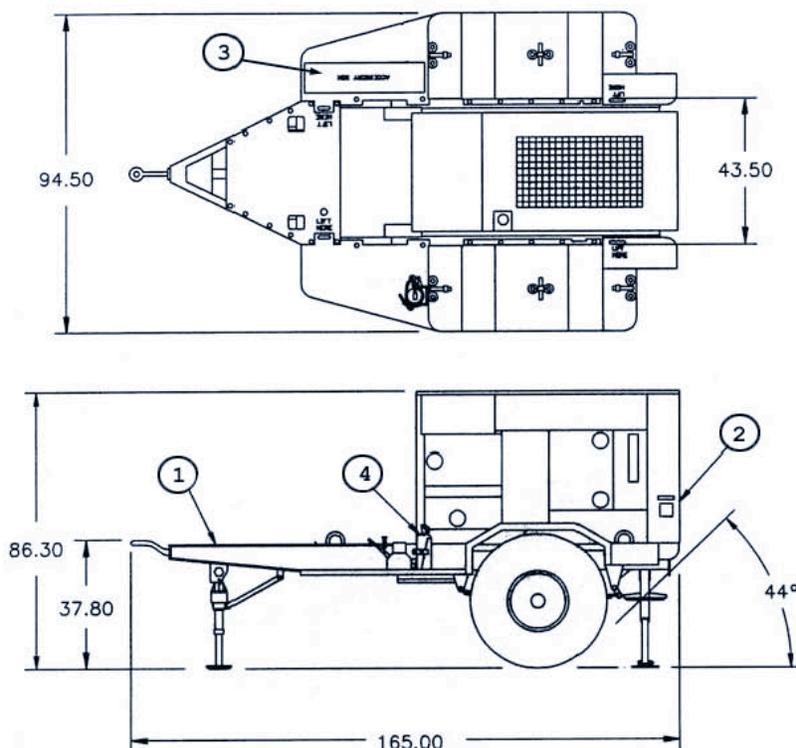


FIGURE C-45 TQG, Generator Set, DED, 60 kW

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-805	6115-01-317-2134	G78306	M50900
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165.0 x 94.5 x 86.3	770	6720	6920
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13228E1616	TA-13229E5755

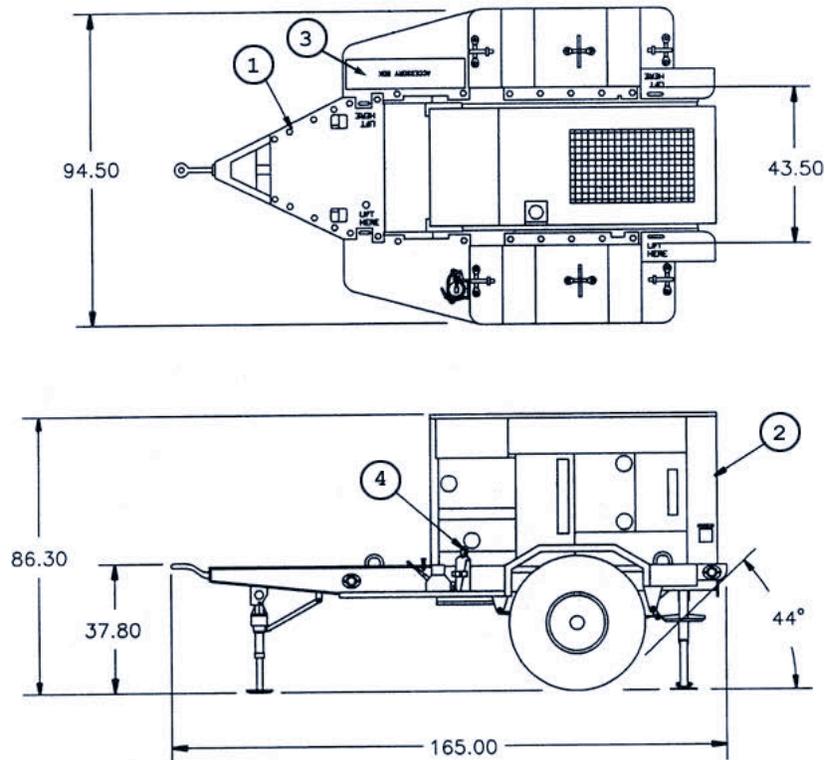


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13214E1257
2	MEP-806A	1	6115-01-274-7390
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-46 PU-805 - TQG Power Unit, DED, 60 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-806	6115-01-317-2133	G17460	M51000
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165.0 x 94.5 x 86.3	770	6815	7015
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13228E1616	TA-13229E5760

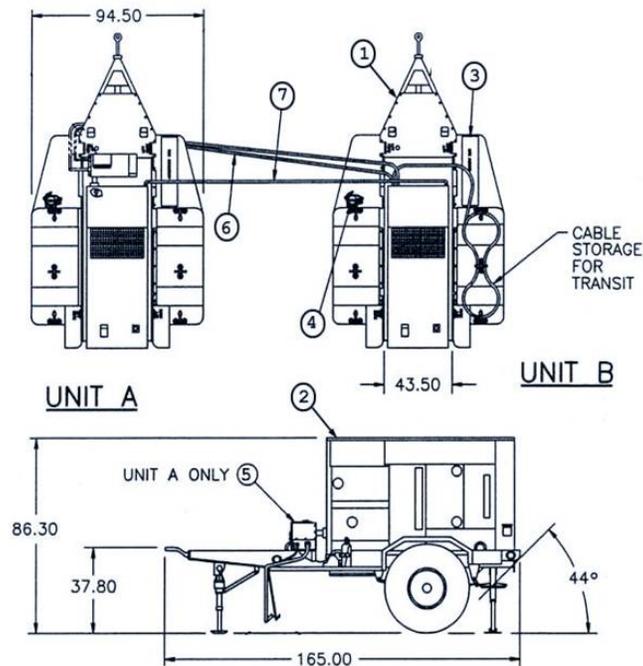


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	1	97403-13214E1257
2	MEP-816A	1	6115-01-274-7395
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-47 PU-806 - TQG Power Unit, DED, 60 kW, 400 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-41	6115-01-303-7896	P42194	M51100
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165.0 x 94.5 x 86.3 (2x)	770 (2x)	Unit A: 6695 Unit B: 6745	Unit A: 7695 Unit B: 7745
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13228E1616	TA-13229E5710

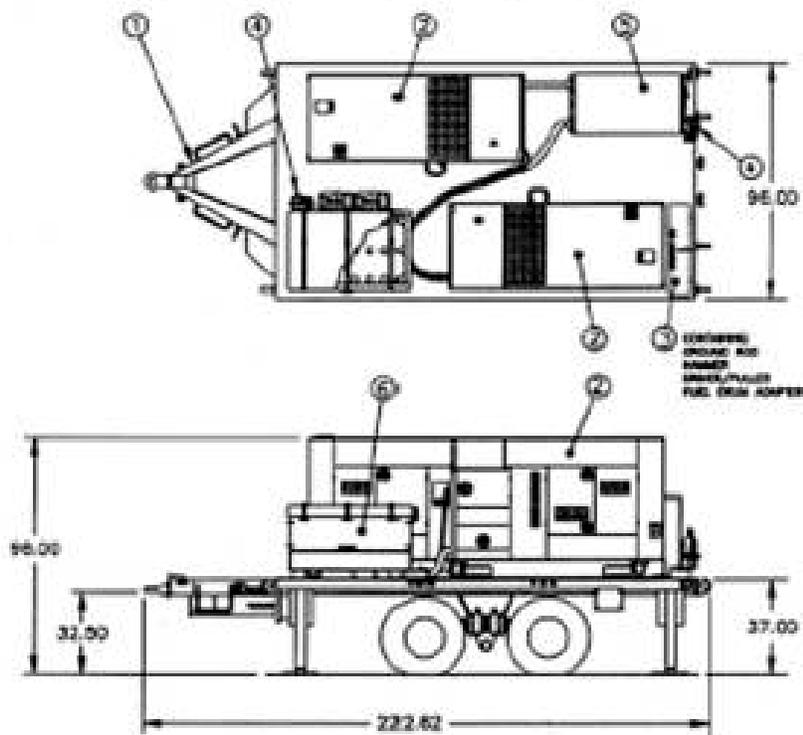


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified trailer, M200A1	2	97403-13214E1257
2	MEP-806A	2	6115-01-274-7390
3	Accessory box	2	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box (unit A)	1	97403-13229E5795
6	Cable assembly (unit B)	1	97403-13229E5741
7	Paralleling cable assembly	2	30554-88-22209

FIGURE C-48 PP-AN/MJQ-41 - TQG Power Plant, DED, 60 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-1612	6115-01-349-1536		M510
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
222.6 x 96.0 x 96.0	1172	14700	15800
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13228E1617	TA-13229E9635

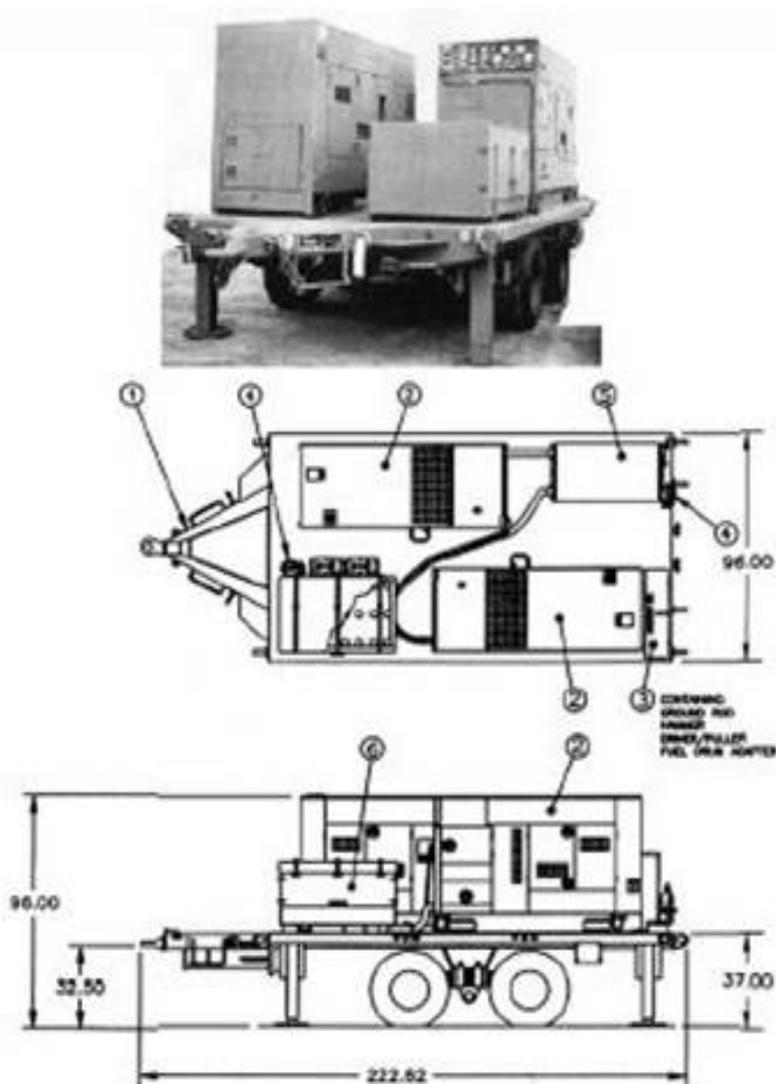


FIND	COMPONENT	QTY	IDENTIFIER
1	5 Ton modified trailer, M106E1	1	
2	MEP-806A	2	6115-01-274-7390
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box	1	97403-13230E4550
6	Cable storage box	1	97403-13230E4580

FIGURE C-49 PP-AN/MJQ-1612 - TQG Power Plant, 60 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-1610			M510
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
222.6 x 96.0 x 96.0	1172	14700	15800
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13228E1617	TA-13229E4595



FIND	COMPONENT	QTY	IDENTIFIER
1	5 Ton modified trailer, M106E1	1	
2	MEP-816A	2	6115-01-274-7395
3	Accessory box	1	97403-13229E7946
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Switch box	1	97403-13230E4550
6	Cable storage box	1	97403-13230E4580

FIGURE C-50 PP-AN/MJQ-1610 - TQG Power Plant, 60 kW, 400 Hz

MIL-STD-633FC.3.1.20 Military Standard Generator Set, DED, 60 kW, 50/60HzTABLE C-XVIII Characteristic Data for MEP-105A

Identification Data				
Model	MEP 105A			
Description	MIL-STD, Generator Set, DED, Tactical, Precise, 60 kW, 50/60Hz			
NSN	6115-00-118-1252			
LIN				
SSN				
Specification	NOT PROCURABLE (MIL-G-52884/7)			
Configuration	Fully housed. Skid Base Mounted. Lifting/ tie-down attachments provided. Fork lift provision			
Physical Characteristics				
Dimensions LWH (in)				
Ship Cube (ft ³)				
Weight (lbs)	4300			
Engine	Diesel. Std: MIL-STD-1410. Horsepower: 167 @ 1800 RPM. No. of Cyl: 6. Cycle: 4. Liquid cooled. 24 VDC electric start. Operating speed: 50 Hz: 1500 RPM, 60 Hz: 1800 RPM.			
Instrumentation	Voltmeter. Frequency meter, Ammeter, Hourmeter. Wattmeter (% load). Oil pressure gage. Battery charging ammeter (% current) Fault indicating system Coolant temperature indicator Fuel level.			
Fuels	Primary: VV-F-800; Diesel Fuel Oil, types DF-1, DF-2 and DF-A. Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.			
Fuel Tank Capacity (Gal)	55 (approx 8 hours at rated load)			
Performance Characteristics				
Power Rating	50 kW/50 Hz		60 kW/60 Hz,	
	Sea Level	5000 feet	Sea level	5000 feet
	-25° F(-31.7°C) to +125°F(+51.7°C)	-25°F(-31.7°C) to +107°F(+41.7°C)	-25° F(-31.7°C) to +125° F(+51.7°C)	-25° (-31.7°C) to +107°F(+41.7°C)
	Winterization system extends lower temperature limit to minus 65° F (-53.9° C).			
Environmental Capability	Fungus and moisture treatment.			
Protective Devices	Short circuit, Overvoltage, Overload and Reverse Power protection. Low oil pressure, High temperature, Low fuel level and Overspeed cut-off switch.			
Fuel consumption	6 gal/hour at rated load			
Human Factors				
Noise	86 dBA @ 25 feet			
Reliability (MTBF)	420 hr (specified)			
Maintenance Ratio				
Electrical Characteristics				
Basic Design	Drip proof generator enclosure. Capable of parallel operation. Solid state voltage regulator. Brushless rotary exciter.			
EMI	Suppression to MIL-STD-461 limits.			
EMP				
Motor load	30% Dip/ 0.7 sec recovery			
Frequency	50 Hz		60 Hz	
Voltage Connection	120/208V, 3ph,4wire.	240/416V, 3ph,4wire.	120/208V, 3ph,4wire.	240/416V, 3ph,4wire.
Voltage adj. Range	190 – 213 V	380 – 426 V	197 – 240 V	395 – 480 V
Freq. adj. Range	48 – 52 Hz		58 – 62 Hz	

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TABLE C-XVIII Characteristic Data for MEP-105A Continued

Electrical Performance			
Electric Power Quality	Frequency	AC Voltage	
Regulation	0.25%	1%	
Voltage modulation			
Short term steady state stability (30 sec)	0.5% bandwidth	1% bandwidth	
Long term steady state stability (4 hr)	1% bandwidth	2% bandwidth	
Application of rated load	transient	1.5 % undershoot	15% dip
	recovery time	1 sec	0.5 sec
Rejection of rated load	transient	1.5% overshoot	15% rise
	recovery time	1 sec	0.5 sec
Max waveform deviation factor			
Individual waveform harmonic			
DC ripple			
Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Winterization Kit (Fuel burning)	6115-00-407-8314	45	Int
Winterization Kit (Electric)	6115-00-455-7693	40	Int
Winterization Kit, Aux, Fuel burning	6115-00-463-9098	350	Aux: (41x40x26)
Winterization Kit, Aux, Elect.	6115-00-463-9099	260	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8	Int
Load Bank	6115-00-407-8322	272	Ext: H+15
Wheel Mounting Kit	6115-00-463-9092	564	Ext: L+8,W+32,H+9
Panel, Auto, Load Transfer, 60 Hz	6115-00-477-7932	825	Aux: (44x19x42)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 5-6115-545-12	TO 35C2-3-444-1	TM-00038G-12	NAVFAC P-8-626-12
TM 5-6115-545-34	TO 35C2-3-444-2	TM-00038G-35	NAVFAC P-8-626-34
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LO 5-6115-545-12			

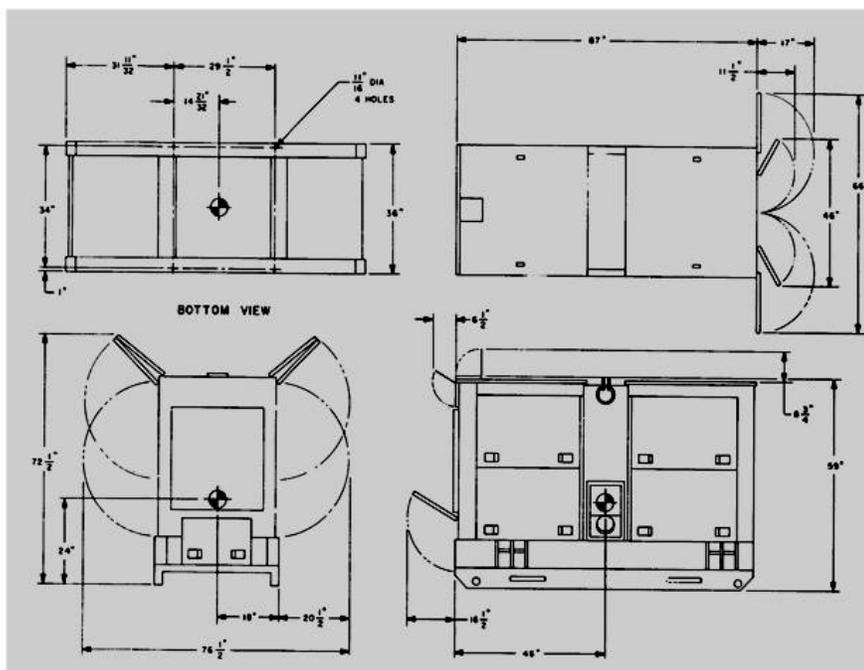
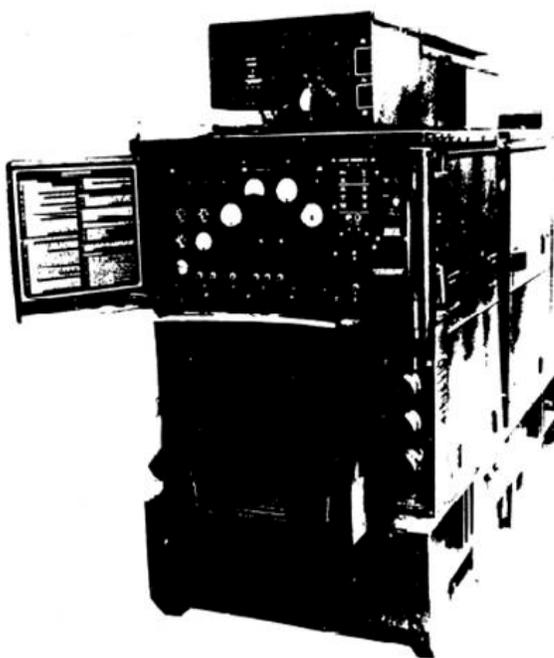


FIGURE C-51 Mil Std Generator Set, DED, 60 kW, 50/60 Hz

MIL-STD-633FC.3.1.21 Military Standard Generator Set, DED, 60 kW.TABLE C-XIX Characteristic Data for MEP 006A and MEP 115A

Identification Data						
Model	MEP-006A			MEP-115A		
Description	Generator Set, DED, 60kW, 50/60 Hz			Generator Set, DED, 60kW, 400 Hz		
NSN	6115-00-118-1243			6115-00-118-1253		
LIN	J38301			J38506		
SSN	M531					
Specification	NOT PROCURABLE					
Trailer Configuration	PU-650B/G, FIGURE C-53 ; AN/MJQ-12A, FIGURE C-55			PU-707A/M, FIGURE C-54		
Physical Characteristics						
Dimensions LWH (in)	87.0 x 36.0 x 59.0					
Ship Cube (ft ³)	101					
Wet Weight (lbs)	4240			4400		
Engine	6 cylinder Diesel, 167 hp @ 1800 RPM (60 Hz), liquid cooled, 24 Volt starter.			6 cylinder Diesel, 180 hp @ 2000 RPM (400 Hz), liquid cooled, 24 Volt starter.		
Instrumentation	Hourmeter, voltmeter, frequency meter, ammeter, wattmeter, oil pressure gage, battery charging ammeter, fault indicating system, temperature & fuel level.					
Fuels	Diesel: DL-1, DL-2 and Jet fuel: JP-8, Jet A-1.					
Fuel Tank Capacity (Gal)	55					
Performance Characteristics						
Power Rating	60 kW, 60 or 400 Hz; 50 kW, 50 Hz @ 0.8 pf from -25°F (-65 F with winterization kit) to 125°F/MSL, 107°F/5000 ft.					
Environmental Capability	-25°F(-65°F with winterization kit) to 125°F, rain, humidity, altitude, sand/dust, transportation, cold storage, salt spray, fungus.					
Protective Devices	Overload, over voltage, short circuit, reverse power, low oil pressure, high temperature, low fuel, overspeed.					
Fuel consumption	6 gal/hour @ rated load					
Human Factors	MIL-STD-1474. Operable in arctic and NBC clothing.					
Noise	86 dBA @ 25 feet					
Reliability (MTBF)	500 hr (spec)			450 hr (spec)		
Electrical Characteristics						
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary alternator.					
EMI	Suppressed to MIL-STD-461 limits.					
EMP	Not protected					
Motor load	40% dip/ 5 sec recovery			25% dip/ 0.7 sec recovery		
Voltage Connection	120/208V, 3 phase, 4 wire			240/416V, 3 phase, 4 wire		
Frequency	50 Hz	60 Hz	400 Hz	50 Hz	60 Hz	400 Hz
Voltage adj. Range	190 – 213 V	197 – 240 V	197 – 229 V	380 – 426 V	395 – 480 V	395 – 458 V
Electrical Performance						
Electric Power Quality	MEP-006A			MEP-115A		
	Frequency	AC Voltage		Frequency	AC Voltage	
Regulation	2-3% (adj)	3%		0.25%	1%	
Voltage modulation						
Short term steady state stability (30 sec)	2%	2%		0.5%	1%	
Long term steady state stability (4 hr)	3%	4%		1%	2%	
Application of rated load	transient	3%	20%	1.5%	12%	
	recovery time	3 sec	3 sec	1 sec	0.5 sec	
Rejection of rated load	transient	4%	20%	1.5%	12%	
	recovery time	3 sec	3 sec	1 sec	0.5 sec	
Max waveform deviation factor		5%			5%	
Individual waveform harmonic		2%			2%	

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TABLE C-XIX Characteristic Data for MEP 006A and MEP 115A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Fuel burning winterization kit	6115-00-407-8314	45	Internal
Electrical winterization kit	6115-00-455-7693	40	Internal
Aux fuel burning winterization kit	6115-00-463-9098	350	41 x 40 x 26 (Aux)
Aux electrical winterization kit	6115-00-463-9099	260	36 x 27 x 19 (Aux)
Remote control box	6115-00-420-8490	8	Internal
Load bank	6115-00-407-8322	272	H+15
Wheel mounting kit	6115-00-463-9092	564	L+8 W+32 H+9
Auto load tranf panel 60 Hz	6115-00-471-7932	825	44 x 19 x 42 (Aux)
Paralleling cable	6140-00-197-4934	4	negligible
Precise relay assembly 60Hz	6115-00-276-7622		internal
Auto standby panel, 400 Hz	6115-00-463-9096	825	44 x 19 x 42 (Aux)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-545-12	TO35C2-3-444-1	TM 00038G-12	P-8-626-12
TM5-6115-545-34	TO35C2-3-444-2	TM 00038G-34	P-8-626-34
TM5-6115-545-24P	TO35C2-3-444-4	SL-4-00038G	P-8-626-24P
LO-5-6115-545-12			



MEP-006A or MEP-115A

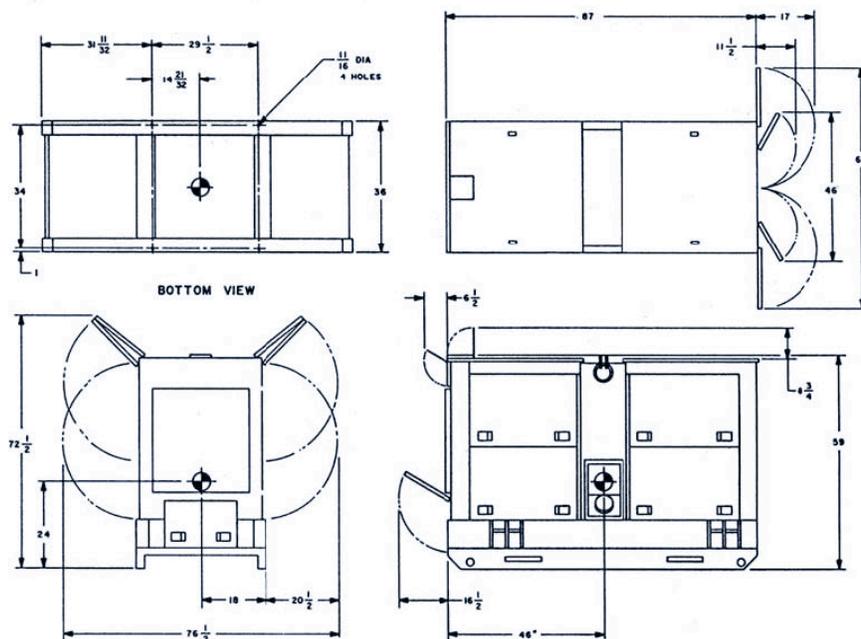
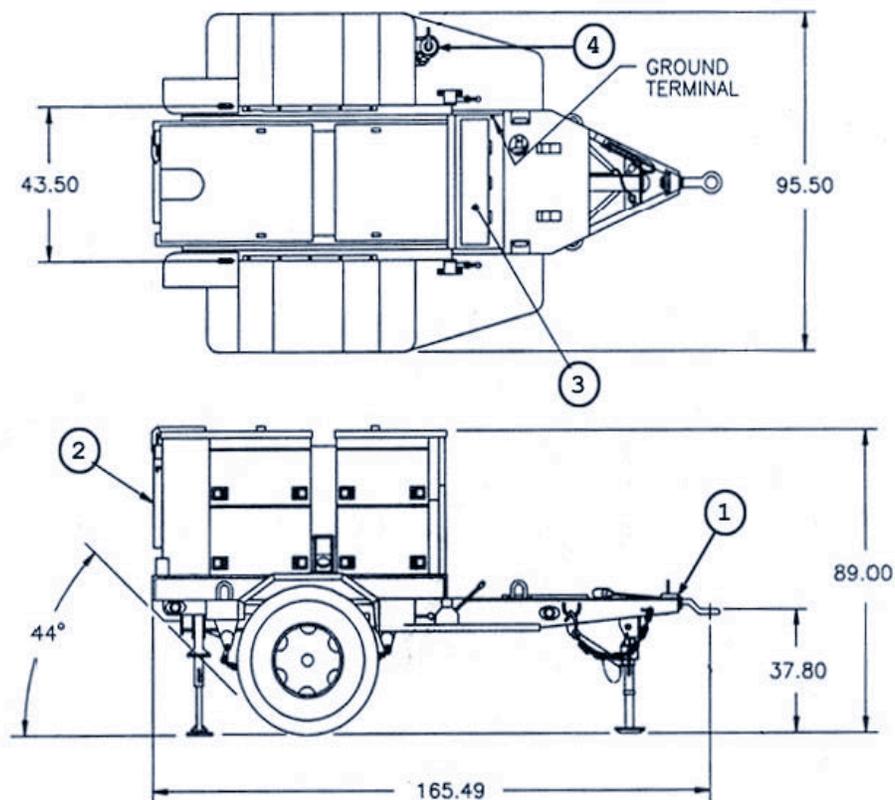


FIGURE C-52 Mil Std Generator Set, DED, 60 kW

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Identification Data			
Model	NSN	LIN	SSN
PU-650B/G	6115-00-258-1622	J35629	M509
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165.5 x 95.5 x 89.0	837	8100	7800
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7494	TA-13220E4454

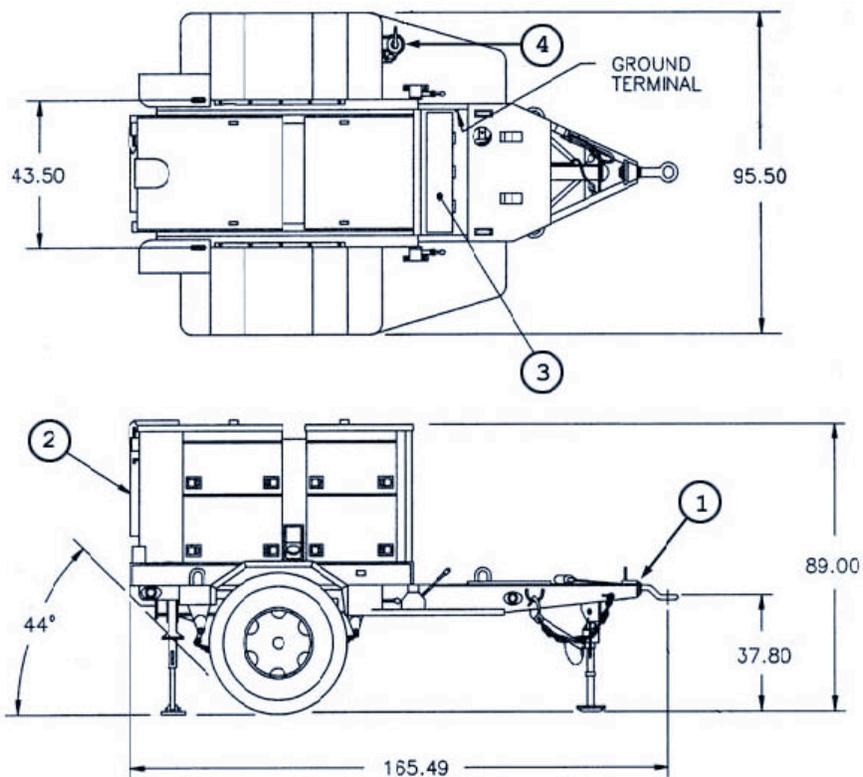


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified Trailer, M200A1	1	97403-13214E1257
2	MEP-006A	1	6115-00-118-1243
3	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512
4	Accessory box	1	97403-13226E7737

FIGURE C-53 PU-650B/G – Power Unit, DED, 60 kW, 50/60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PU-707A/M	6115-00-394-9573	G52886	M510
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
165.5 x 95.5 x 89.0	837	8200	7800
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7494	TA-13220E6332

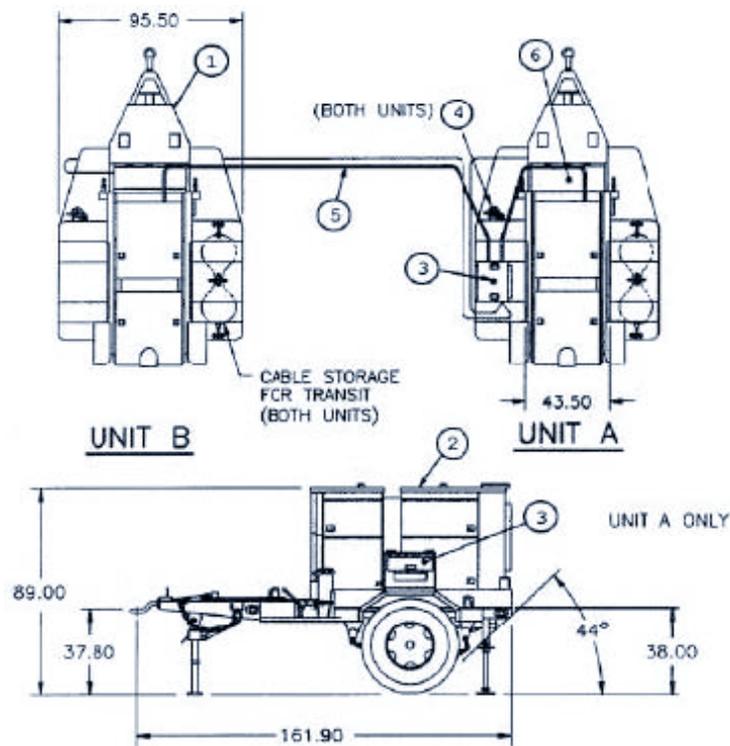


FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 Ton modified Trailer, M200A1	1	97403-13214E1257
2	MEP-115A	1	6115-00-118-1253
3	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512
4	Accessory box	1	97403-13226E7737

FIGURE C-54 PU-707A/M - Power Unit, DED, 60 kW, 400 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-12A	6115-00-257-1602	P27823	M511
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft³)	Wet Weight (lbs)	Ship Weight (lbs)
161.9 x 95.5 x 87.0 (each of 2 units)	818 (each unit)	Unit A: 6630 Unit B: 6620	Unit A: 6480 Unit B: 6420
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7494	TA-13221E7350



FIND	COMPONENT	QTY	IDENTIFIER
1	2-1/2 ton flatbed trailer, M200A1	2	97403-13214E1257
2	MEP-006A	2	6115-00-118-1243
3	Switch box (unit A), 97403-13229E6776 (old)	1	97403-13229E5795
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Cable assembly	1	97403-13226E7626
6	Accessory box	2	97403-13226E7737

FIGURE C-55 PP-AN/MJQ-12A - Power Plant, DED, 60 kW, 50/60 Hz

MIL-STD-633FC.3.1.22 Military Standard Generator Set, DED, 100 kW.TABLE C-XX Characteristic Data for MEP-007A

Identification Data				
Model	MEP-007A			
Description	MIL-STD Generator Set, DED, Tactical, Utility, 100 kW, 50/60 Hz			
NSN	6115-01-133-9101			
LIN				
SSN				
Specification	NOT PROCURABLE (MIL-G-52884/11)			
Configuration	Fully housed. Mounted on skid base. Lifting & tie-down attachments provided. Fork lift provision			
Physical Characteristics				
Dimensions LWH (in)				
Ship Cube (ft ³)				
Weight (lbs)	6680			
Engine	Diesel, Std: MIL-STD-1410. Horsepower: 170 min @1800 RPM. No. of : 6. Cycle: 4. Liquid cooled. 24 VDC electric start. Op. speed:50 Hz: 1500 RPM, 60 Hz: 1800 RPM.			
Instrumentation	Voltmeter, frequency meter, ammeter, hourmeter, wattmeter(%load), oil pressure gage, battery charging ammeter(%current), fault indicating system, coolant temp.indicator & fuel level			
Fuels	Primary: VV-F-800; Diesel Fuel Oil, types DF-1, DF-2 and DF-A. Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.			
Fuel Tank Capacity (Gal)	90 (approx 8 hours at rated load)			
Performance Characteristics				
Power Rating	100 kW/60 Hz		83.3 kW/50 Hz	
	Sea Level	5000 feet	Sea level	5000 feet
	-25° F(-31.7°C) to +125°F(+51.7°C)	-25°F(-31.7°C) to +107°F(+41.7°C)	-25° F(-31.7°C) to +125° F(+51.7°C)	-25° (-31.7°C) to +107°F(+41.7°C)
	Winterization system extends lower temp. limit to -65°F(-53.9°C)			
Environmental Capability	Fungus and moisture treatment.			
Protective Devices	Short circuit protection. Overvoltage protection. Reverse power protection. Low oil protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.			
Fuel consumption	8.5 gal/hour at rated load			
Human Factors				
Noise	88 dBA @ 25 feet			
Reliability (MTBF)	800 hr (specified)			
Electrical Characteristics				
Basic Design	Drip proof generator enclosure. Capable of parallel operation. Solid state voltage regulator. Brushless rotary exciter.			
EMI	Suppression to MIL-STD-461 limits			
EMP				
Motor load	40% dip/ 5 sec recovery			
Frequency	50 Hz		60 Hz	
Voltage Connection	120/208V, 3 ph, 4 wire	240/416V, 3 ph, 4 wire	120/208V, 3 ph, 4 wire	240/416V, 3 ph, 4 wire
Voltage adj. Range	190 – 213 V	380 – 426 V	197 – 240 V	395 – 480 V
Freq. adj. Range	48 - 52 Hz		58 - 62 Hz	
Electrical Performance				
Electric Power Quality		Frequency	AC Voltage	
Regulation		2-3% Adjustable	3%	
Short term steady state stability (30 sec)		2% Bandwidth	2% Bandwidth	
Long term steady state stability (4 hr)		3% Bandwidth	4% Bandwidth	
Application of rated load	transient	3% Undershoot	20% dip	
	recovery time	3 sec	3 sec	
Rejection of rated load	transient	4% Undershoot	20% rise	
	recovery time	3 sec	3 sec	
Max waveform deviation factor			5%	
Individual waveform harmonic			2%	

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TABLE C-XX Characteristic Data for MEP-007A Continued

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Winterization Kit (Fuel burning)	6115-00-463-9082	45	Int
Winterization Kit (Electric)	6115-00-463-9084	40	Int
Winterization Kit, Aux, Fuel Burning	6115-00-463-9098	350	Aux: (41x40x26)
Winterization Kit, Aux, Elect.	6115-00-463-9099	260	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8	Int
Load Bank	6115-00-463-9086	370	Ext: H+19
Wheel Mounting Kit	6115-00-463-9089	580	Ext: H+13,L+9,W+30
Panel, Auto, Load Transfer, 60Hz	6115-00-477-7932	825	Aux: (44x19x42)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 5-6115-457-12	TO 35C2-3-442-1	TM-07464A-12	NAVFAC-P-8-627-12
TM 5-6115-457-24P	TO 35C2-3-442-4	SL-4-07464A	NAVFAC-P-8-627-24P
TM 5-6115-457-34	TO 35C2-3-442-2	TM-07464A-35	NAVFAC-P-8-627-34

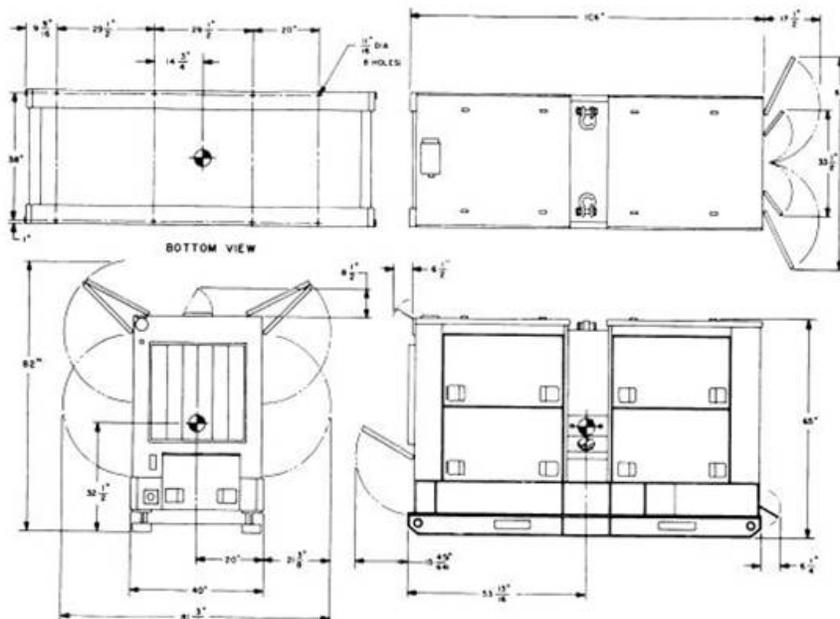


FIGURE C-56 Mil Std Generator Set, DED, 100 kW, 50/60 Hz

MIL-STD-633F**C.3.1.23 Military Standard Generator Set, DED, 100 kW, 50/60 Hz****TABLE C-XXI Characteristic Data for MEP-007B**

Identification Data			
Model	MEP-007B		
Description	Generator Set, DED, 100 kW, 50/60 Hz		
NSN	6115-01-036-6374		
LIN	J38712		
SSN	M544		
Specification	NOT PROCURABLE		
Trailer Configuration	PU-495B/G, FIGURE C-58		
Physical Characteristics			
Dimensions LWH (in)	106.0 x 40.0 x 65.0		
Ship Cube (ft ³)	159		
Weight (lbs)	Dry: 6680	Wet: 7500	Shipping: 8400
Engine	6 cylinder Diesel, 217 hp @ 1800 RPM, 24 VDC starter. Liquid cooled.		
Instrumentation	On/off switch, hour, volt, frequency, ammeter, wattmeter, oil pressure, coolant temperature, battery charging ammeter, fuel level and fault indication.		
Fuels	Diesel: DL-1, DL-2 and Jet fuel: JP-8, Jet A-1		
Fuel Tank Capacity (Gal)	91		
Performance Characteristics			
Power Rating	100 kW, 60 Hz or 83.3 kW, 50 Hz @ 0.8 pf from -25°F (-65°F with winterization kit) to 125°F/MSL, 107°F/5000 ft.		
Environmental Capability	-25°F to 125°F, rain, humidity, altitude, sand/ dust, transportation, -65°F cold storage, salt spray, fungus.		
Protective Devices	Short circuit, overvoltage, overload, reverse power, low oil pressure, high temperature, low fuel, and overspeed.		
Fuel consumption	8.5 gal/hour		
Human Factors	MIL-STD 1474		
Noise	85 dBA @ 25 feet		
Reliability (MTBF)	680 hr (specified)		
Maintenance Ratio			
Electrical Characteristics			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Brushless rotary exciter. Capable of parallel operation.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	Not protected		
Motor load	30% dip / 0.7 sec recovery		
Voltage Connection	120/208V, 3 phase, 4 wire		240/416V, 3 phase, 4 wire
Frequency	50 Hz	60 Hz	50 Hz 60 Hz
Voltage adj. Range	190 - 213 V	197 - 240 V	380 - 426 V 395 - 480 V
Electrical Performance			
Electric Power Quality	Frequency		AC Voltage
Regulation	0.25% (adj)		1%
Voltage modulation			
Short term steady state stability (30 sec)	0.5%		1%
Long term steady state stability (4 hr)	1%		2%
Application of rated load	transient	4% @ 75% rated	15% dip
	recovery time	2 sec load	0.5 sec
Rejection of rated load	transient	4% @ 75% rated	15% rise
	recovery time	2 sec load	0.5 sec
Max waveform deviation factor			5%
Individual waveform harmonic			2%
D ripple			

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TABLE C-XXI Characteristic Data for MEP-007B Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Winterization Kit (fuel)	6115-00-xxx-xxxx		internal
Winterization Kit (elect)	6115-00-xxx-xxxx		internal
Winterization Kit, Aux, Fuel	6115-00-463-9098	350	41 x 40 x 26
Winterization Kit, Aux, Elect	6115-00-463-9098	260	36 x 27 x 19
Remote Control Box	6115-00-420-8490	8	internal
Load Bank	6115-00-463-9086	370	H+19
Wheel Mounting Kit	6115-00-463-9089	580	H+13, L+9, W+30
Panel, Auto, load transfer, 60Hz	6115-00-477-7932	825	44 x 19 x 42
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-600-12	TO35C2-3-442-1	TM-07464-12	P-8-628-12
TM5-6115-600-34	TO35C2-3-442-2	TM-07464-34	P-8-628-34
TM5-6115-600-24P	TO35C2-3-442-4	SL-4-07464G	P-8-628-24P
LO-5-6115-600-12			

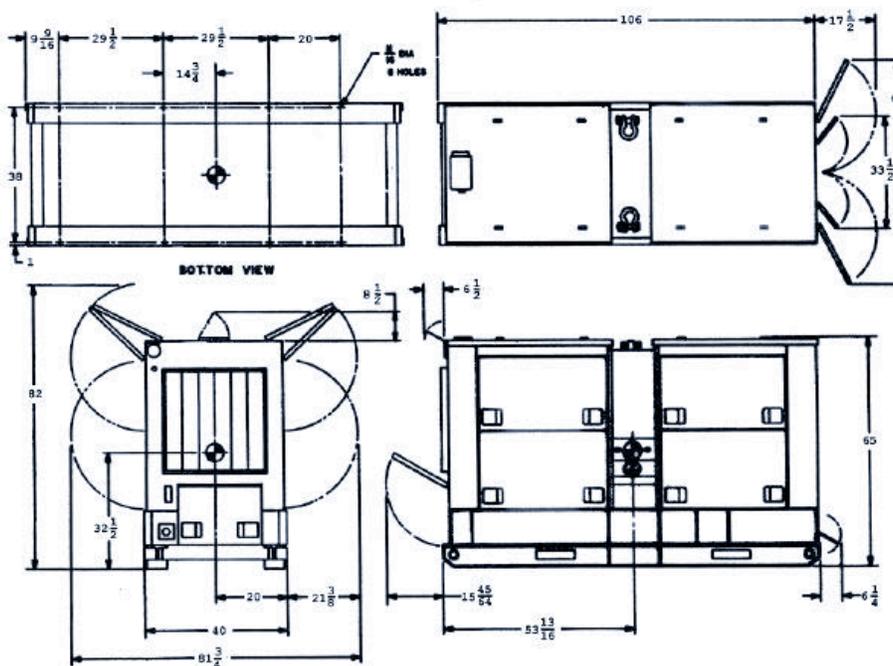
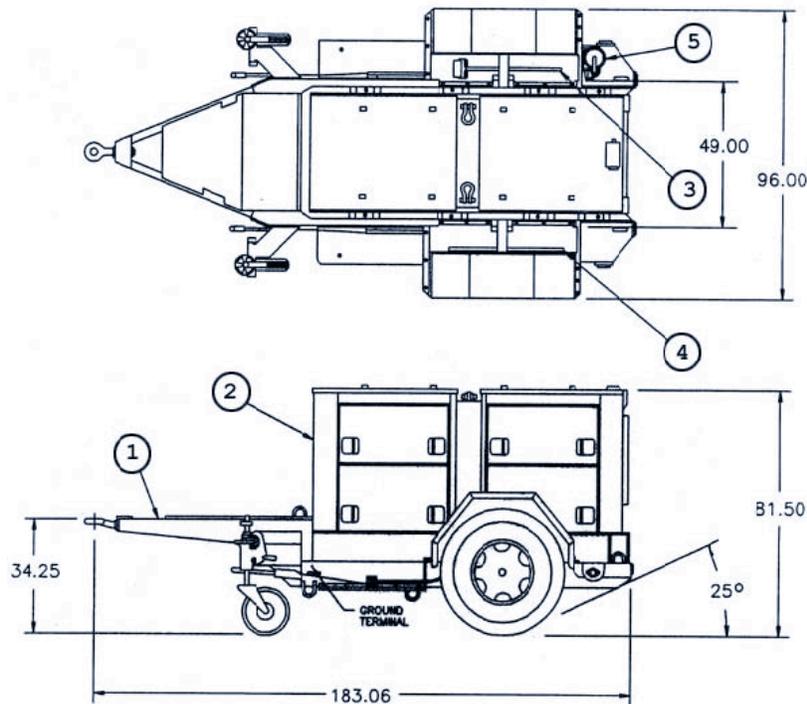


FIGURE C-57 Mil Std Generator Set, DED, 100 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PU-495B/G	6115-01-134-0165	J35801	M547
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
183.1 x 96.0 x 81.5	855	10650	10400
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE	97403-13226E7490	TA-13226E1340



FIND	COMPONENT	QTY	IDENTIFIER
1	3-1/2 Ton modified Trailer, M353	1	97403-13220E6330
2	MEP-007B	1	6115-01-036-6374
3	8 lb engineers hammer	1	5120-00-251-4489
4	Ground rod, 9 ft	1	5975-00-296-5324
5	Fire extinguisher, 5 lb., A-A-1106	1	4210-00-270-4512

FIGURE C-58 PU-495B/G - Power Unit, DED, 100 kW, 50/60 Hz

MIL-STD-633FC.3.1.24 Military Standard Generator Set, DED, 200 kW, 50/60 Hz.TABLE C-XXII Characteristic Data for MEP-009A and MEP-108A

Identification Data				
Model	MEP-009A		MEP-108A	
Description	Generator Set, DED, 200 kW, 50/60 Hz		Generator Set, DED, 200 kW, 50/60 Hz	
NSN	6115-00-133-9104		6115-00-935-9729	
LIN	J40158		J40150	
SSN	M504		M504	
Specification	NOT PROCURABLE			
Trailer Configuration	AN/MJQ-11 , FIGURE C-60			
Physical Characteristics				
Dimensions LWH (in)	114 x 50 x 75			
Ship Cube (ft ³)	247			
Wet Weight (lbs)	10,260		10,350	
Engine	6 cylinder Diesel, 344 hp @ 1800RPM (60Hz), 296 hp @ 1500RPM (50Hz), liquid cooled, 24Volt starter.			
Instrumentation	Hourmeter, voltmeter, frequency meter, ammeter, wattmeter, oil pressure, battery charge, fault indicating system, temp, fuel level.			
Fuels	Diesel: DL-1, DL-2; Jet fuel: JP-8, Jet A-1.			
Fuel Tank Capacity (Gal)	130			
Performance Characteristics				
Power Rating	200 kW, 60 Hz or 167 kW, 50 Hz @ 0.8 power factor from -25°F (-65°F with winterization kit) to 125°F/MSL, 107°F/5000 ft.			
Environmental Capability				
Protective Devices	Overload, over voltage, short circuit, reverse power, low oil pressure, high temperature, low fuel, overspeed.			
Fuel consumption	10 gal/hour @ rated load		16 gal/hour @ rated load	
Human Factors				
Noise				
Reliability (MTBF)	520 hr specified		480 hr specified	
Maintenance Ratio				
Electrical Characteristics				
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, brushless rotary alternator			
EMI	Suppressed to MIL-STD-461 limits.			
EMP	Not protected.			
Motor load	40% dip / 5sec recovery		30% dip/ 0.7 sec recovery	
Voltage Connection	120/208 V, 3 phase, 4 wire		240/416 V, 3 phase, 4 wire	
Frequency	50 Hz	60 Hz	50 Hz	60 Hz
Voltage adj. Range	190 – 213 V	197 – 240 V	380 – 426 V	395 – 480 V
Electrical Performance				
Electric Power Quality	MEP-009A		MEP-108A	
	Frequency	AC Voltage	Frequency	AC Voltage
Regulation	2-3% (adj)	3%	0.25%	1%
Voltage modulation				
Short term steady state stability (30 sec)	2%	2%	0.5%	1%
Long term steady state stability (4 hr)	3%	4%	1%	2%
Application of rated load	transient	3%	20 %	4%
	recovery time	3 sec	3 sec	2 sec
Rejection of rated load	transient	4%	20%	4%
	recovery time	3 sec	3 sec	2 sec
Max waveform deviation factor		5%		5%
Individual waveform harmonic		2%		2%
DC ripple				

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TABLE C-XXII Characteristic Data for MEP-009A and MEP-108A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Fuel burning winterization kit	6115-00-403-3761	85	internal
Electrical winterization kit	6115-00-489-7285	45	internal
Aux fuel burning winterization kit	6115-00-463-9098	350	41 x 40 x 26 (Aux)
Aux electrical winterization kit	6115-00-463-9099	260	36 x 27 x 19 (Aux)
Remote control box	6115-00-420-8490	8	Internal
Load bank	6115-00-403-3762	580	H+23
Auto load transfer panel, 60 Hz	6115-00-471-7932	825	44 x 19 x 42 (Aux)
Paralleling cable, 009A	6140-00-197-4934	4	negligible
Precise relay assembly, 009A	6115-00-199-1616		internal
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-458-12	TO35C2-3-443-1	TM 07536A-12	NAFAC P-8-629-12
TM5-6115-458-34	TO35C2-3-443-2	TM 07536A-35	NAFAC P-8-629-34
TM5-6115-458-24P	TO35C2-3-443-4	SL-4-07536	NAFAC P-8-629-24P

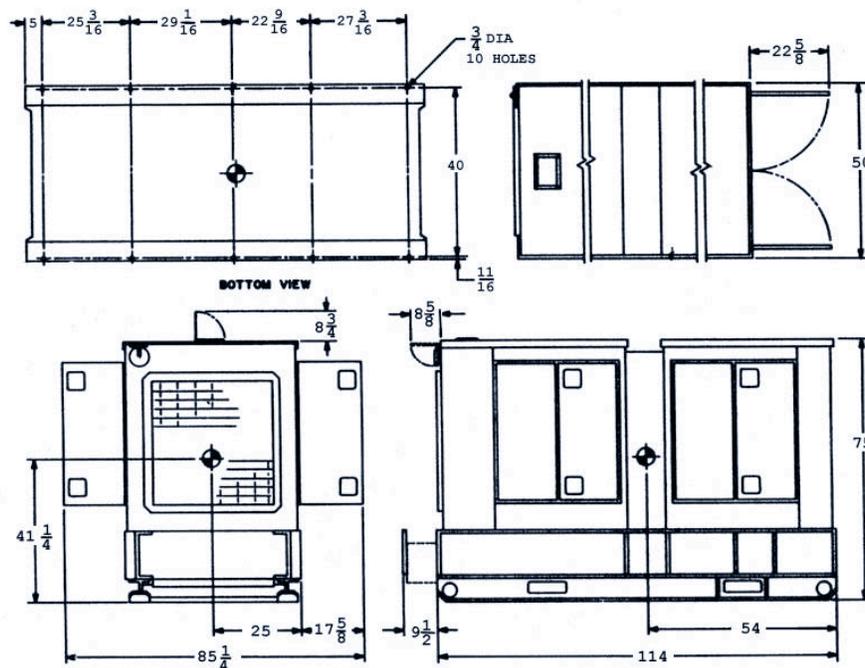
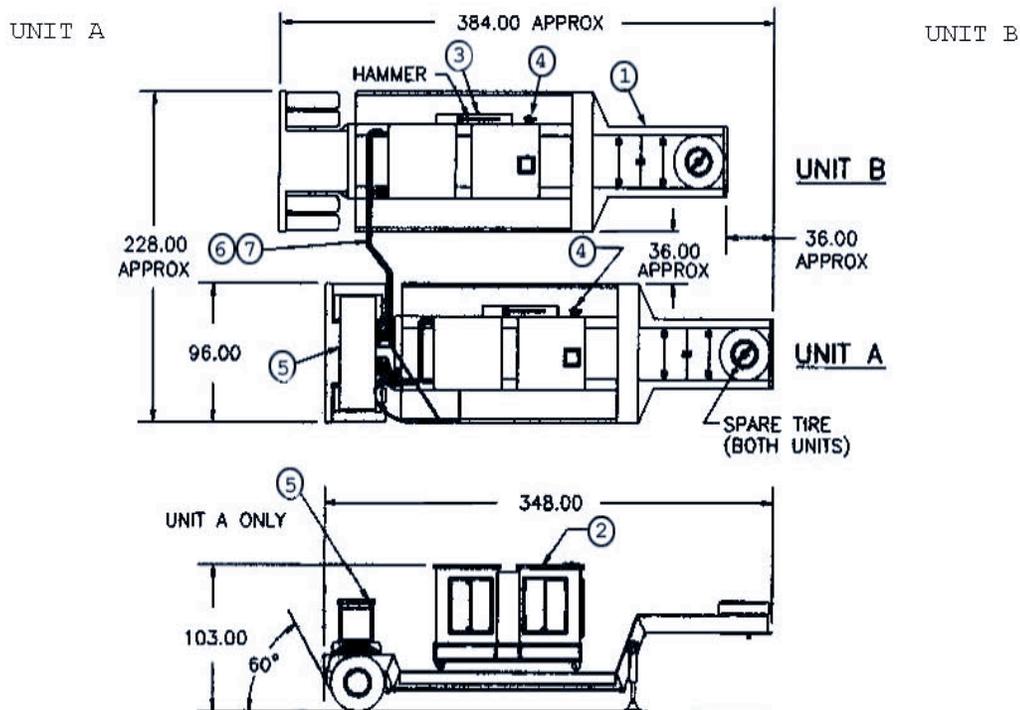


FIGURE C-59 Mil Std Generator Set, DED, 200 kW, 50/60 Hz

MIL-STD-633F

Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-11	6115-00-134-8485	P27821	M527
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
348 x 96 x 103	1991 (each unit)	Unit A: 20740 Unit B: 20000	Unit A: 19920 Unit B: 19160
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE		TA-13220E6338



COMPONENT	QTY	FIND	IDENTIFIER
Semi trailer, commercial	2	1	
MEP-009A	2	2	6115-00-133-9104
Accessory box	2	3	
Fire extinguisher, 5 lb., A-A-1106	2	4	4210-00-270-4512
Distribution box (unit A)	1	5	97403-13226E2180
Cable assembly	1	6	97403-13218E5088
Cable assembly	1	7	97403-13218E5089

FIGURE C-60 AN/MJQ-11 - Power Plant, DED, 200 kW, 50/60 Hz

MIL-STD-633FC.3.1.25 Military Standard Generator Set, DED, 200 kW, 50/60 HzTABLE C-XXIII Characteristic Data for MEP-009B

Identification Data			
Model	MEP-009B		
Description	Generator Set, 200 kW, DED, 50/60 Hz		
NSN	6115-01-051-4096		
LIN	J40158		
SSN	M504		
Specification	NOT PROCURABLE		
Trailer Configuration	AN/MJQ-11A; FIGURE C-62		
Physical Characteristics			
Dimensions LWH (in)	114 x 50 x 75		
Ship Cube (ft ³)	247		
Weight (lbs)	Dry: 10,500		Wet: 11,500
Engine	Diesel, 340 horsepower @ 1800 RPM (60 Hz), 290 horsepower @ 1500 RPM (50 Hz), 24 VDC starter, liquid cooled.		
Instrumentation	Hourmeter, voltmeter, frequency meter, ammeter, Wattmeter, oil pressure, coolant temperature, battery charging ammeter, fuel level and fault indication		
Fuels	Diesel: DL-1, DL-2; Jet fuel: JP-8, Jet A-1.		
Fuel Tank Capacity (Gal)	130		
Performance Characteristics			
Power Rating	200 kW, 60 Hz (167 kW, 50 Hz) @ 0.8 pf from -25°F (-65°F with winterization kit) to 125°F/MSL, 107°F/5000 ft.		
Environmental Capability	-25°F to 125°F, rain, humidity, altitude, sand/dust, transportation, -45°F cold storage, salt spray, fungus.		
Protective Devices	Short circuit, overvoltage, overload, reverse power, low oil pressure, high temperature, low fuel, and overspeed.		
Fuel consumption	16 gal/hour		
Human Factors	MIL-STD-1474		
Noise	93 dBA @ 25 feet		
Reliability (MTBF)	468 hr specified		
Maintenance Ratio			
Electrical Characteristics			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Brushless rotary exciter. Capable of parallel operation.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	Not protected		
Motor load	30% dip, 0.7 sec recovery		
Voltage Connection	120/208V, 3 phase, 4 wire		240/416V, 3 phase, 4 wire
Frequency	50 Hz	60 Hz	50 Hz 60 Hz
Voltage adj. Range	190 – 213 V	197 – 240 V	380 – 426 V 395 – 480 V
Electrical Performance			
Electric Power Quality	Frequency		AC Voltage
Regulation	0.25%		1%
Voltage modulation			
Short term steady state stability (30 sec)	0.5% bandwidth		1% bandwidth
Long term steady state stability (4 hr)	1% bandwidth		2% bandwidth
Application of rated load	transient	4%	15%
	recovery time	2 sec	0.5sec
Rejection of rated load	transient	4%	15%
	recovery time	2 sec	0.5sec
Max waveform deviation factor			5%
Individual waveform harmonic			2%
DC ripple			

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TABLE C-XXIII Characteristic Data for MEP-009B Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Fuel burning winterization kit	6115-01-xxx-xxxx		internal
Electrical winterization kit	6115-01-xxx-xxxx		internal
Wheel kit	2530-01-221-8306	8	H+
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-614-12	TO35C2-3-443-1	TM 07536A-12	NAVFAC P-8-645-12
TM5-6115-614-34	TO35C2-3-443-2	TM 07536A-35	NAVFAC P-8-645-34
TM5-6115-614-24P	TO35C2-3-443-14	SL-4-07536-25B	NAVFAC P-8-645-24P

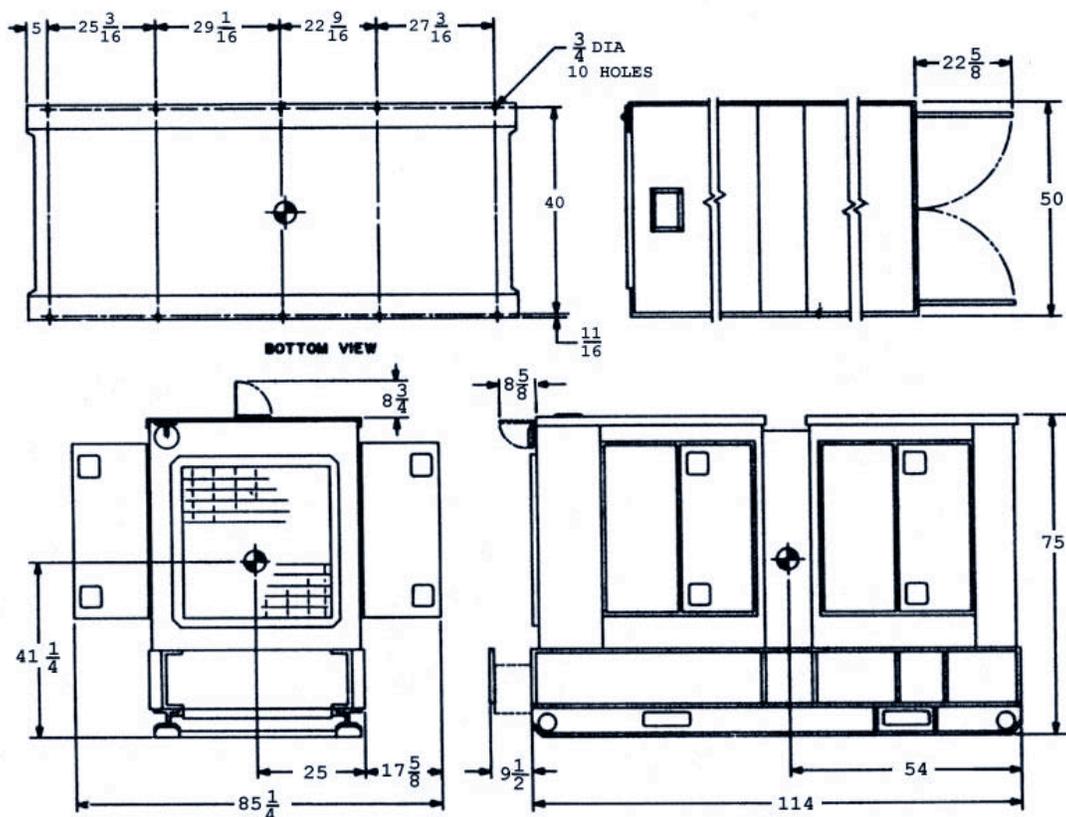
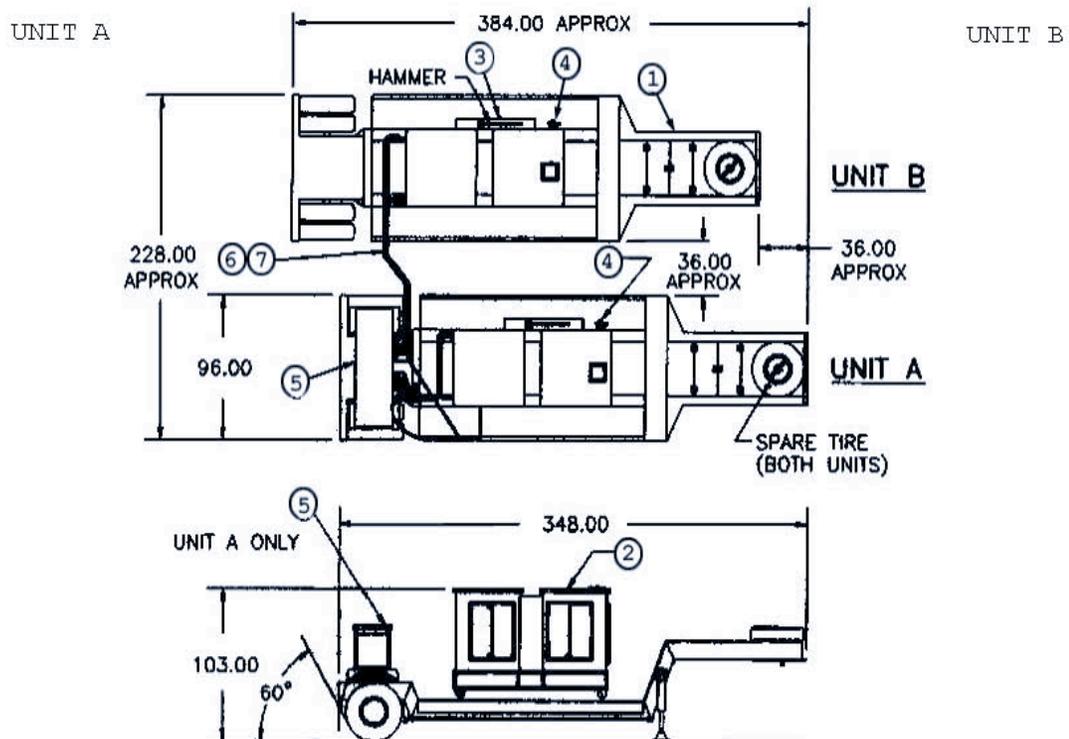


FIGURE C-61 Mil Std Generator DED, 200 kW, 50/60 Hz

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Identification Data			
Model	NSN	LIN	SSN
PP-AN/MJQ-11A	6115-00-394-9585	P27821	M527
Physical Characteristics			
Dimension: LWH (in)	Ship Cube (ft ³)	Wet Weight (lbs)	Ship Weight (lbs)
348 x 96 x 103	1991 (each unit)	Unit A: 20740 Unit B: 20000	Unit A: 19920 Unit B: 19160
Documentation			
Technical Manual	Specification	Camouflage Drawing	Top Assembly
	NOT PROCURABLE		TA-13220E6338



FIND	COMPONENT	QTY	IDENTIFIER
1	Semi trailer, commercial	2	
2	MEP-009B	2	6115-01-051-4096
3	Accessory box	2	
4	Fire extinguisher, 5 lb., A-A-1106	2	4210-00-270-4512
5	Distribution box (unit A)	1	97403-13226E2180
6	Cable assembly	1	97403-13218E5088
7	Cable assembly	1	97403-13218E5089

FIGURE C-62 AN/MJQ-11A - Power Plant, DED, 200 kW, 50/60 Hz

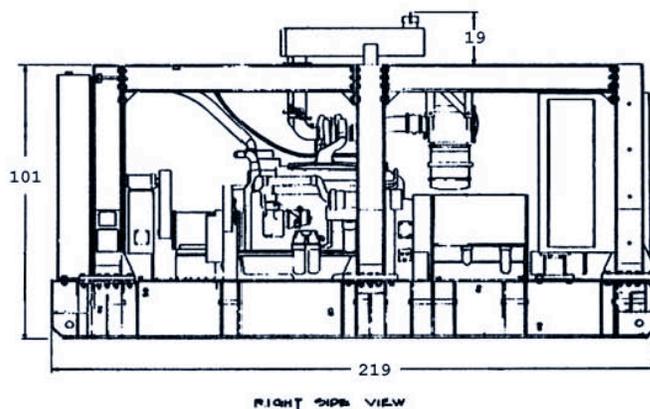
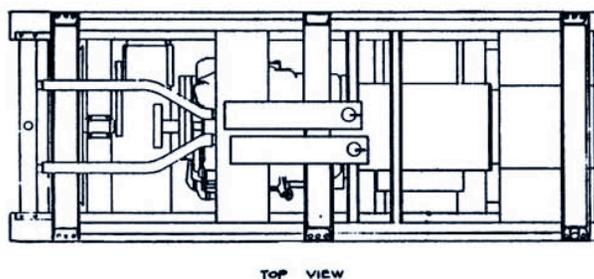
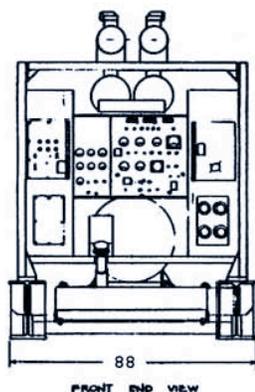
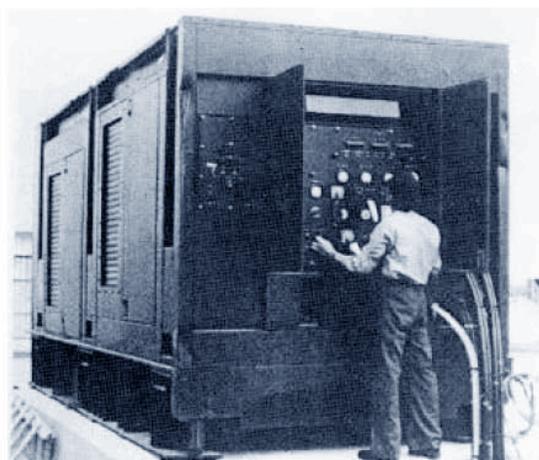
MIL-STD-633FC.3.1.26 Military Standard Generator Set, DED, 500 kW.TABLE C-XXIV Characteristic Data for MEP-029A and MEP-029B

Identification Data			
Model	MEP-029A		MEP-029B
Description	Generator Set, 500 kW, DED, 50/60 Hz		
NSN	6115-01-030-6085		6115-01-318-6302
LIN	G40424		
SSN	M577		
Specification	NOT PROCURABLE		
Physical Characteristics			
Dimensions LWH (in)	219 x 88 x 120		
Ship Cube (ft ³)	1338		
Weight (lbs)	Dry: 32,550		Wet: 34,050
Engine	12 cylinder Diesel, 830 horsepower @ 1800 RPM (60 Hz), 690 horsepower @ 1500 RPM (50 Hz), 24 VDC starter, liquid cooled.		
Instrumentation	Voltmeter, frequency meter, ammeter, hourmeter, kilowattmeter, oil pressure, oil temperature, coolant temperature, battery charging ammeter, fuel level, 50/60 Hz clock.		
Fuels	Diesel: DL-1, DL-2. Emergency: Jet fuel: JP-8, Jet A-1.		
Fuel Tank Capacity (Gal)	117		
Performance Characteristics			
Power Rating	500 kW, 60 Hz (417 kW, 50 Hz) @ 0.8 pf from 3°F to 125°F/ MSL; 400 kW(334 kW) @ 0.8 pf to 107°F/5000 ft; 375 kW(313 kW) @ 0.8 pf to 95°F/8000 ft. Housing kit and built in electric engine preheat system extends lower temperature limit to -25°F.		
Environmental Capability	32°F to 125°F, rain, humidity, altitude, sand/ dust, transportation, -65°F cold storage, salt spray, fungus.		
Protective Devices	Overvoltage, short circuit, overload synchronizing check relay, reverse power, low oil pressure, high coolant temp, high oil temp, low fuel, and overspeed, annunciator alarm System		
Fuel consumption	37 gal/hour		
Human Factors	MIL-STD-1474.		
Noise	Housed:86 dBA @ 25 feet. Unhoused: 89 dBA @ 25 feet		
Reliability (MTBF)	500 hr (specified).		
Maintenance Ratio			
Electrical Characteristics			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Brushless rotary exciter. Capable of parallel operation. Circuit breaker.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	None.		
Motor load			
Voltage Connection	120/208V, 3 phase, 4 wire		240/416V, 3 phase, 4 wire
Frequency	50 Hz	60 Hz	50 Hz 60 Hz
Voltage adj. Range	190 – 213 V	197 – 250 V	380 – 426 V 395 – 500 V
Electrical Performance			
Electric Power Quality	Frequency		AC Voltage
Regulation	0.25% isoc; 0-3% adj		2%
Voltage modulation			
Short term steady state stability (30 sec)	0.5% bandwidth		1% bandwidth
Long term steady state stability (4 hr)	1% bandwidth		2% bandwidth
Application of rated load	transient	4%	20% dip
	recovery time	4 sec	3 sec
Rejection of rated load	transient	4%	30% rise
	recovery time	4 sec	3 sec
Max waveform deviation factor			5%
Individual waveform harmonic			2%
DC ripple			

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TABLE C-XXIV Characteristic Data for MEP-029A and MEP-029B— Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Housing kit	6115-01-070-7550	1950	negligible
Remote control module	6115-01-070-7553	371	33.8x23.5x58.8 (Aux)
Auto control module	6115-01-275-7912	267	30.8x13.3x66.4 (Aux)
Remote control cable	6115-01-087-4127	150	None. Cable is 1000 ft
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM5-6115-593-12	TO-35C2-3-463-1		
TM5-6115-593-34	TO-35C2-3-463-2		
TM5-6115-593-24P	TO-35C2-3-463-4		

FIGURE C-63 Mil Std Generator Set, DED, 500 kW, 50/60 Hz

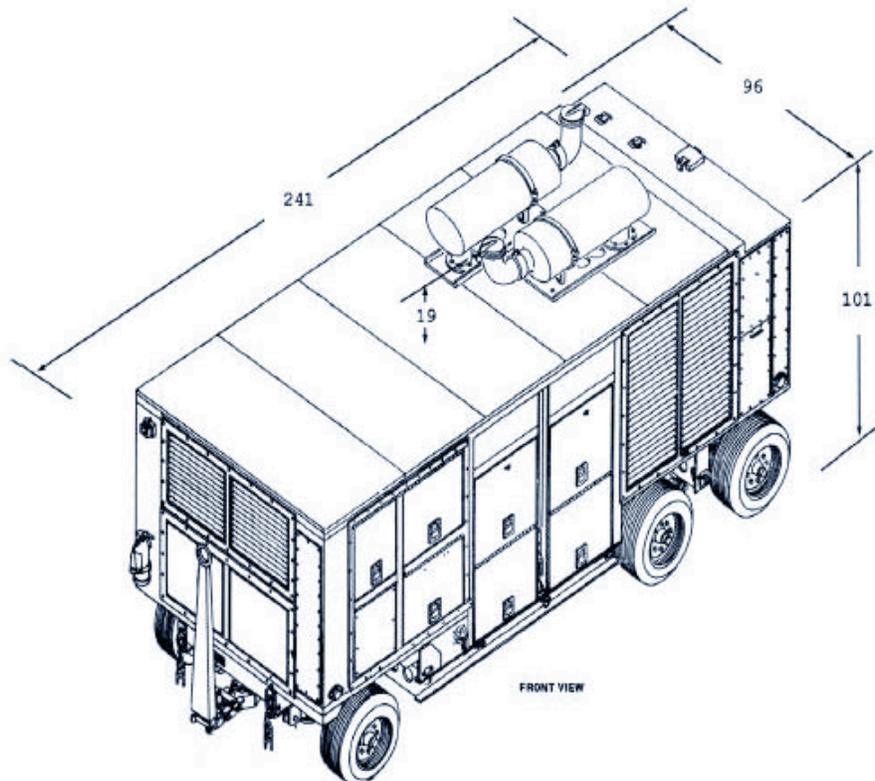
MIL-STD-633F**C.3.1.27 Military Standard Generator Set, DED, 750 kW, 50/60 Hz.****TABLE C-XXV Characteristic Data for MEP-012A**

Identification Data		
Model	MEP-012A	
Description	Generator Set, 750 kW, DED, 50/60 Hz, Prime Power, Housed, Wheel Mounted	
NSN	6115-00-143-3850	
LIN	J	
SSN	M	
Specification	NOT PROCURABLE	
Physical Characteristics		
Dimensions LWH (in)	241 x 96 x 101	
Ship Cube (ft ³)	1353	
Weight (lbs)	Dry : 24,500	Wet: 25,374
Engine	12 cylinders, turbocharged Diesel, 1235 hp @ 1800 RPM (60 Hz), 1030 hp @ 1500 RPM (50 Hz), liquid cooled, 24 VDC starter.	
Instrumentation	Voltmeter, frequency meter, ammeter, hourmeter, kilowattmeter, oil pressure, oil temperature, coolant temperature, battery charging ammeter, fuel level, 50/60 Hz clock.	
Fuels	Diesel: DL-1, DL-2. Emergency: Jet fuel: JP-8, Jet A-1.	
Fuel Tank Capacity (Gal)	42	
Performance Characteristics		
Power Rating	750 kW, 60 Hz (625 kW, 50 Hz) @ 0.8 pf from -25°F to 125°F/MSL, 90°F/1500 ft; 600 kW(500 kW) to 107°F/5000 ft.	
Environmental Capability	-25°F to 125°F, rain, humidity, altitude, sand/ dust, transportation, -65°F cold storage, salt spray, fungus.	
Protective Devices	Overvoltage, short circuit, overload synchronizing check relay, reverse power, low oil pressure, high coolant temp, high oil temp, low fuel, and overspeed, annunciator alarm system.	
Fuel consumption	55 gal/hour	
Human Factors	MIL-STD-1474	
Noise	Housed: 85 dBA @ 25 feet	
Reliability (MTBF)		
Maintenance Ratio		
Electrical Characteristics		
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Brushless rotary exciter. Capable of parallel operation. Circuit breaker.	
EMI	Suppressed to MIL-STD-461 limits.	
EMP	Not protected	
Motor load		
Voltage Connection	2200/3800V, 3 phase, 4 wire	2400/4160V, 3 phase, 4 wire
Frequency	50 Hz	60 Hz
Voltage Adj Range	3240 - 3960 V	3745 - 4574 V
Electrical Performance		
Electric Power Quality	Frequency	AC Voltage
Regulation	0-5% adjustable	2%
Voltage modulation		
Short term steady state stability (30 sec)	0.5%	1%
Long term steady state stability (4 hr)	1%	2%
Application of rated load	transient	3% dip
	recovery time	4 sec
Rejection of rated load	transient	4% rise
	recovery time	4 sec
Max waveform deviation factor		5%
Individual waveform harmonic		2%
DC ripple		

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TABLE C-XXV Characteristic Data for MEP-012A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
None			
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM9-6115-622-12	TO35C2-3-474-1	TM6115-12/10	NAVFAC P8-635-12
TM9-6115-622-34	TO35C2-3-474-2	TM6115-34/	NAVFAC P8-635-34
TM9-6115-622-24P	TO35C2-3-474-4	TM6115-24/	NAVFAC P8-635-24P

FIGURE C-64 Mil Std Generator Set, DED, 750 kW, 50/60 Hz

MIL-STD-633FC.3.1.28 Military Standard Generator Set, DED, 750 kW.TABLE C-XXVI Characteristic Data for MEP-208A

Identification Data		
Model	MEP-208A	
Description	Generator Set, 750 kW, DED, 50/60 Hz, Housed, Prime Power	
NSN	6115-00-450-5881	
LIN	J30093	
SSN	M564	
Specification	NOT PROCURABLE	
Physical Characteristics		
Dimensions LWH (in)	330 x 96 x 100 (with 24 ft ² control room)	
Ship Cube (ft ³)	1850	
Wet Weight (lbs)	39600	
Engine	12 cylinder, turbocharged Diesel, 1235 hp @ 1800 RPM (60 Hz), 1030 hp @ 1500 RPM (50 Hz), liquid cooled, 24 VDC starter.	
Instrumentation	Voltmeter, frequency meter, ammeter, hourmeter, kilowattmeter, oil pressure, oil temperature, coolant temperature, battery charging ammeter, fuel level, 50/60 Hz clock	
Fuels	Diesel:DL-1, DL-2; Jet fuel: JP-8, Jet A-1	
Fuel Tank Capacity (Gal)	134	
Performance Characteristics		
Power Rating	750 kW 60 Hz (625 kW, 50 Hz) @ 0.8 pf from 25°F to 125°F/MSL, 90°F/1500 ft; 600 kW(500 kW) to 107°F/5000 ft; 563 kW(469 kW) to 95°F/8000 ft.	
Environmental Capability	-25°F to 125°F, rain, humidity, altitude, sand/ dust, transportation, -65°F cold storage, salt spray, fungus.	
Protective Devices	Overvoltage, short circuit, overload synchronizing check relay, reverse power, low oil pressure, high coolant temp, high oil temp, low fuel, and overspeed, annunciator alarm system.	
Fuel consumption	55 gal/hour	
Human Factors	MIL-STD-1474.	
Noise	85 dBA @ 25 feet, housed (89 dBA unhoused).	
Reliability (MTBF)	1200 hr (specified).	
Maintenance Ratio		
Electrical Characteristics		
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Brushless rotary exciter. Capable of parallel operation. Circuit breaker.	
EMI	Suppressed to MIL-STD-461 limits.	
EMP	None.	
Motor load		
Frequency	50 Hz	60 Hz
Voltage Connection	2200/3800 V, 3 phase, 4 wire	2400/4160 V, 3 phase, 4 wire
Voltage adj. Range	3240 - 3960 V	3745 - 4574 V
Freq. adj. Range	48 - 52 Hz	58 - 62 Hz
Electrical Performance		
Electric Power Quality	Frequency	AC Voltage
Regulation	0-5% adjustable	2%
Short term steady state stability (30 sec)	0.5%	1%
Long term steady state stability (4 hr)	1%	2%
Application of rated load	transient	3% dip
	recovery time	4 sec
Rejection of rated load	transient	4 % rise
	recovery time	4 sec
Max waveform deviation factor		5%
Individual waveform harmonic		2%
DC ripple		

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TABLE C-XXVI Characteristic Data for MEP-208A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Remote control module	6115-00-xxx-xxxx	371	stored in control room
Remote control cable	6115-00-xxx-xxxx	150	None-Cable is 1000 ft
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM9-6115-604-12			NAVFAC P-8-633-12
TM9-6115-604-34			NAVFAC P-8-633-34
TM9-6115-60424P			NAVFAC P-8-633-24P

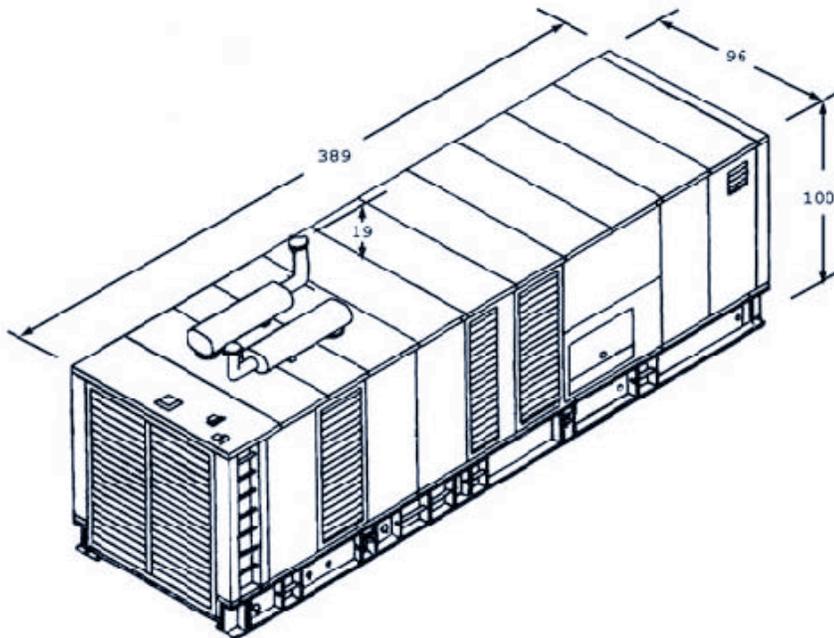


FIGURE C-65 Mil Std Generator Set, DED, MEP-208A, 750 kW, 50/60 Hz

MIL-STD-633FC.3.1.29 DPGDS, 750 kW, 50/60HzTABLE C-XXVII Characteristic Data for MEP-810A

Identification Data		
Model	MEP-810A (C-130 transport)	
Description	750 kW,50/60 Hz, DED	
NSN	6115-01-486-4033	
LIN	Not Applicable: Air Force Unit	
SSN		
Specification	NOT PROCURABLE	
Trailer Configuration	Unit is wheel mounted	
Physical Characteristics		
Dimensions LWH (in)	254 x 96 x 102	
Ship Cube (ft ³)	1440	
Weight (lbs)	25600 (Dry)	
Engine	Diesel (2), 692 x 2 horsepower @ 1800 RPM, Model: Caterpillar 3456EPG, 24 VDC starter.	
Instrumentation	Voltmeter, frequency meter, ammeter, hour-meter, oil pressure, battery charging ammeter.	
Fuels	Diesel DL-1, DL-2; Jet Fuel JP-8.	
Fuel Tank Capacity (Gal)	120 (day tank)	
Performance Characteristics		
Power Rating	750 kW, 0.8 pf lagging @ 4000 ft/125°F	
Environmental Capability	-25°F to 125°F for system. Rain, humidity, altitude, sand/dust, Air, road, rail transportable, vibration, cold storage, salt spray, fungus, 15° incline.	
Protective Devices	Automatic shut down with emergency bypass for low oil pressure, coolant high-temperature, and over-voltage, time over-current.	
Fuel consumption	60 gal/hour @ rated load	
Human Factors	MIL-STD-1474	
Noise	85 dBA @ 7 meters (23 feet)	
Reliability (MTBF)	Greater than 650 hrs	
Maintenance Ratio		
Electrical Characteristics		
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, permanent magnet pilot excited, two Caterpillar SR4B 50/60 Hz generators	
EMI	Meets MIL-STD-461	
EMP	HAEMP IAW MIL-STD-2169	
Motor load	N/A	
Frequency	50 Hz	60 Hz
Voltage Connection	2200/3800 V, 3 phase, 4 wire	2400/4160 V, 3 phase, 4 wire
Voltage adj. Range	3400 – 4000 V	3720 – 4400 V
Freq. adj. Range	±3%	
Electrical Performance		
Electric Power Quality	Frequency	AC Voltage
Regulation	3%	3%
Voltage modulation		1%
Short term steady state stability (30 sec)	1% bandwidth	2% bandwidth
Long term steady state stability (4 hr)	2% bandwidth	2% bandwidth
Application of rated load	transient	3% under
	recovery time	4 sec
Rejection of rated load	transient	5% over
	recovery time	6 sec
Max waveform deviation factor		5%
Individual waveform harmonic		3%
DC ripple		

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TABLE C-XXVII Characteristic Data for MEP-810A – Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Winterization kit			None (internal)
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 9-6115-484-14	TO 35C2-3-518-1	none	none
TM 9-6115-484-24P	TO 35C2-3-518-4		

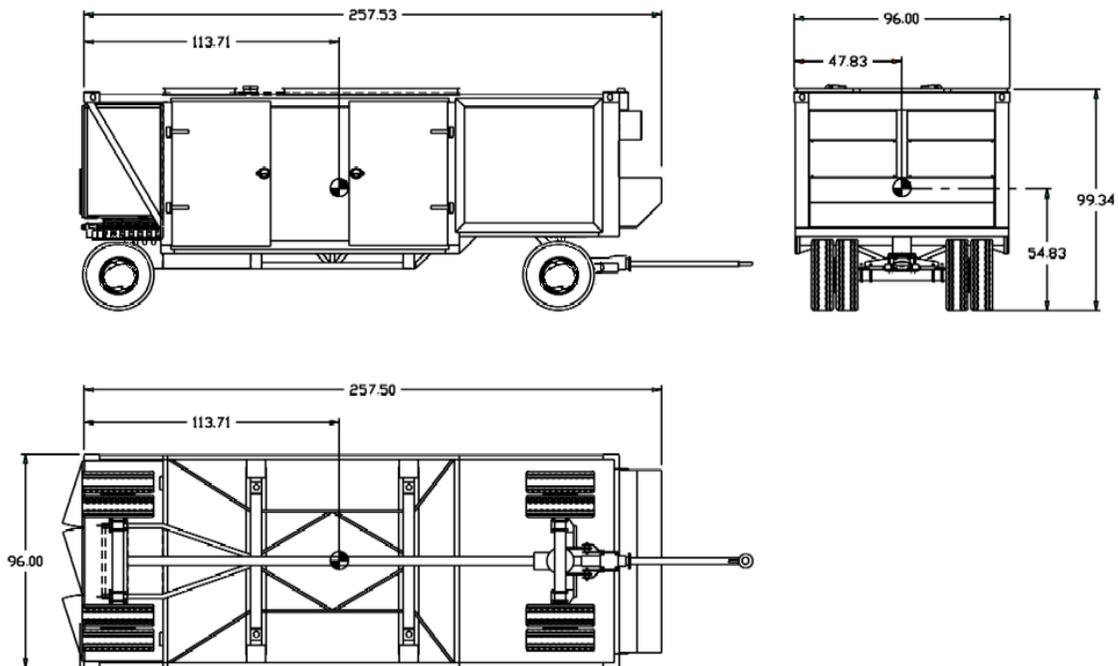


FIGURE C-66 MEP-810A – DPGDS, 750 kW, 50/60 Hz

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C.3.1.30 Aircraft Ground Support Unit, GTE, 10 kW, 28 VDC.

TABLE C-XXVIII Characteristic Data for MEP-362A

Identification Data		
Model	MEP-362A	
Description	Generator Set, GTE, 10 kW, 28 VDC	
NSN	6115-01-161-3992	
LIN	G38140	
SSN		
Specification	NOT PROCURABLE	
Physical Characteristics		
Dimensions LWH (in)	89.0 x 71.0 x 49.0	
Ship Cube (ft ³)	179	
Weight (lbs)	Dry: 960	Wet: 1175
Engine	Gas Turbine, 50300 rpm (12000 at gearbox), Tiernay Turbines Model: 101800-1, 28 VDC starter.	
Instrumentation	On/off switch, hourmeter, voltmeter, output current meter, battery charging meter.	
Fuels	JP-8, Jet-A.	
Mobility	All weather frame and housing, wheel mounted, parking brake. A 40 foot power cable is provided.	
Fuel Tank Capacity (Gal)	32	
Performance Characteristics		
Power Rating	10 kW @ 125°F/MSL, 107°F/5000 ft, 95°F/8000 ft.	
Environmental Capability	-65°F to 125°F, rain, humidity, altitude, sand/dust, transportation, cold storage -65°F, salt spray, fungus.	
Protective Devices	Automatic shut down with emergency bypass for low fuel, low oil pressure, engine overtemp, overspeed, overload, overvoltage, generator overtemp and undervoltage	
Fuel consumption	8 gal/hour	
Human Factors	MIL-STD-1474	
Noise	Not specified.	
Reliability (MTBF)		
Maintenance Ratio		
Electrical Characteristics		
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, generator: Teledyne Brown, model 481-007.	
EMI	Suppressed to MIL-STD-461 limits.	
EMP	HEAMP protected.	
Voltage Connection	28VDC, 2 wire with ground	
Electrical Performance		
Electric Power Quality	DC Voltage	
Regulation	4%	
Voltage modulation		
Short term steady state stability (30 sec)	2% bandwidth	
Long term steady state stability (4 hr)	2% bandwidth	
Application of rated load	transient	30%
	recovery time	1 sec
Rejection of rated load	transient	40%
	recovery time	0.5 sec
Max waveform deviation factor		
Individual waveform harmonic		
DC ripple	5.5%	

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TABLE C-XXVIII Characteristic Data for MEP-362A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
None			
Technical Manuals			
Army	Air Force	Marine Corps	Navy
TM 5-6115-612-12			AG-320B0-OMM-000
TM 5-6115-612-34			AG-320B0-MME-000
TM 5-6115-612-24P	TO 35C2-3-471-4	TM 6115-24P/1	AG-320B0-IPE-000

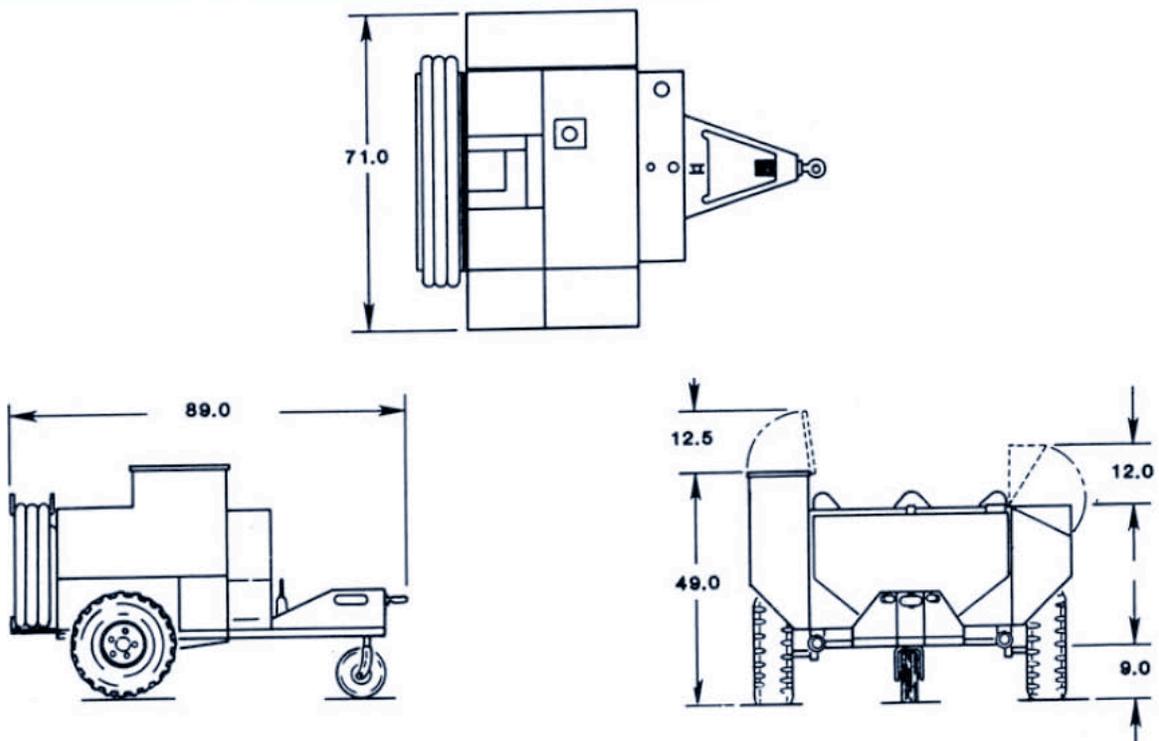


FIGURE C-67 Aircraft Ground Support Unit, GTE, 10 kW, 28 VDC

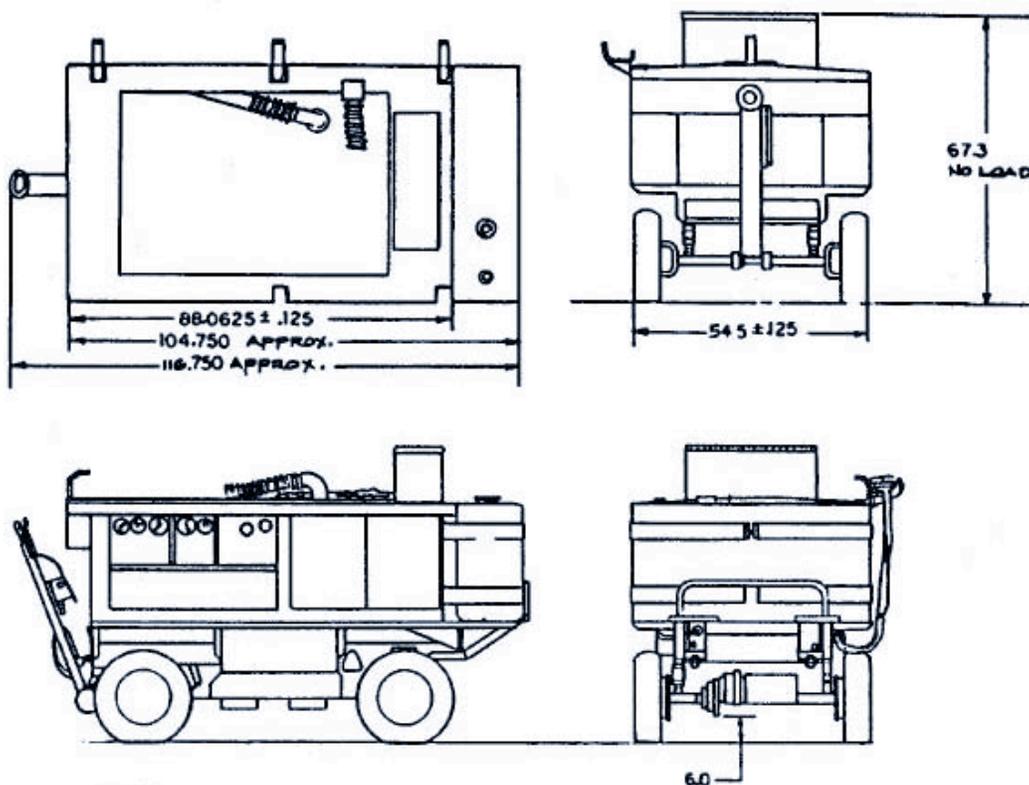
MIL-STD-633FC.3.1.31 Aircraft Ground Support Unit, GTE, 60kW.TABLE C-XXIX Characteristic Data for MEP-356A

Identification Data		
Model	MEP-356A	
Description	Generator Set, GTE, 60kW, 400 Hz, pneumatic, self propelled	
NSN	6115-00-420-8486	
LIN		
SSN		
Specification	NOT PROCURABLE	
Physical Characteristics		
Dimensions LWH (in)	116.75 x 54.5 x 67.3	
Ship Cube (ft ³)	247	
Weight (lbs)	Dry: 2800	Wet: 3940
Engine	Gas turbine, 177 horsepower @ 42,000 rpm, bleed air, 24 VDC starter.	
Mobility	Fully enclosed, electrically self propelled, wheel mounted, AC power cable, pneumatic hose, parking brake.	
Instrumentation	Hour meter, AC/DC voltmeter, frequency meter, battery charging ammeter & voltmeter, fuel level, tachometer.	
Fuels	JP-8, Jet-A.	
Fuel Tank Capacity (Gal)	190	
Performance Characteristics		
Power Rating	60 kW, 0.8 power factor @ 5000 ft/125°F	
Environmental Capability	-65°F to 125°F, rain, humidity, altitude, sand/dust, transportation, -65°F cold storage, salt spray, fungus.	
Protective Devices	Short circuit, AC overvoltage/undervoltage, AC under-frequency, low oil pressure, high temperature, overspeed.	
Fuel consumption	33 gal/hr (41 w/ bleed air)	
Human Factors	MIL-STD-1474	
Noise	93 dBA @ 25 feet	
Reliability (MTBF)	478 Hr. specified	
Pneumatic	Flow rate: 150 – 4 pounds/minute Pressure: 51 – 2 psia @ 385°F	
Electrical Characteristics		
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, Separate AC brushless rotary exciters.	
EMI	Suppressed to MIL-STD-461 limits.	
EMP	Not protected.	
Motor load	Not rated	
Voltage Connection	3 phase: 115/200 V - 4 wire, 60 foot cable: 400 Hz convenience outlet,	DC: 28 V - 2 wire (propulsion and utility only, not for aircraft), 28 VDC slave receptacle.
Electrical Performance		
Electric Power Quality	Frequency	AC Voltage
Regulation		
Voltage modulation		
Short term steady state stability (30 sec)	0.5 % bandwidth	Not rated
Long term steady state stability (4 hr)	Not rated	Not rated
Application of rated load	transient	1% undershoot
	recovery time	0.4 sec
Rejection of rated load	transient	0.25% overshoot
	recovery time	1.5 sec
Max waveform deviation factor		Not rated
Individual waveform harmonic		2%
DC ripple		

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TABLE C-XXIX Characteristic Data for MEP-356A Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
None			
Technical Manuals			
Army	Air Force	Marine Corps	Navy
	TO 35C2-3-372-11		
	TO 35C2-3-13		
	TO 35C2-3-14		



NOTE:
DIMENSIONS ARE IN INCHES.

FIGURE C-68 Aircraft Ground Support Unit, 60 kW

MIL-STD-633FC.3.1.32 Aircraft Ground Support Power Unit, DED.

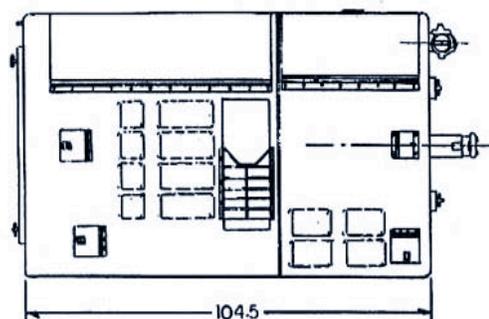
TABLE C-XXX Characteristic Data for MEP-357A

Identification Data			
Model	MEP-357A		
Description	Generator Set, 72 kW, DED, 400 Hz; 21 kW, 28 VDC		
NSN	6115-00-110-1859		
LIN			
Specification	NOT PROCURABLE		
Physical Characteristics			
Dimensions LWH (in)	116.75 x 60.0 x 44.0		
Ship Cube (ft ³)	178		
Weight (lbs)	Dry: 7000	Wet: 7200	
Engine	Diesel, 215 horsepower @ 1846 rpm, Detroit Diesel Co., 24 VDC starter.		
Mobility	Fully enclosed integral trailer mount, AC & DC power cable with retracting reels; parking brake; running lights.		
Instrumentation	On/off switch, hour, AC/DC volt, frequency, AC/DC ammeter, hourmeter, oil pressure, coolant temperature, fuel level, tachometer.		
Fuels	DL-1, DL-2, marine diesel. Emergency: JP-5, JP-8		
Fuel Tank Capacity (Gal)	30		
Performance Characteristics			
Power Rating	72 kW, 400 Hz, @ 0.8 power factor and 21 kW 28VDC @ MSL/125 °F.		
Environmental Capability	-25°F to 125°F, rain, humidity, altitude, sand/dust, transportation, cold storage: -45°F, salt spray, fungus.		
Protective Devices	Low fuel, high coolant temperature, DC overvoltage, AC overvoltage/undervoltage overfrequency/underfrequency, engine overspeed low oil pressure. Fault indicators for above. Thermal and magnetic overload protection.		
Fuel consumption	6.7 gal/hours at rated load		
Human Factors	MIL-STD-1474		
Noise	87 dBA @ 25 feet		
Reliability (MTBF)	250 hr (specified)		
Electrical Characteristics			
Basic Design	Drip proof generator enclosure, fungus & moisture treated, solid state voltage regulator, solderless connectors, static exciter generator 24 VDC power supply with 750 and 1000 amp current limits. Marathon/Lima brushless generator.		
EMI	Suppressed to MIL-STD-461 limits.		
EMP	Not protected.		
Motor load	Not rated		
Voltage Connection	400 Hz, 3 phase: 115/200 V - 4 wire	DC: 28 V - 2 wire.	
Voltage adj. Range	105 - 125 V	23 - 35 V	
Freq. adj. Range	380 - 440 Hz		
Electrical Performance			
Electric Power Quality	Frequency	AC Voltage	DC Voltage
Regulation	1%	1%	0.5 VDC
Voltage modulation		1%	
Short term steady state stability (30 sec)	0.5%	1%	2%
Long term steady state stability (4 hr)	1%	1%	2%
Application of rated load	transient	Not rated	25% dip
	recovery time	1 sec	0.4 sec
Rejection of rated load	transient	Not rated	25% rise
	recovery time	1 sec	0.4 sec
Max waveform deviation factor		Not rated	
Individual waveform harmonic		2%	
DC ripple			1.5 volts

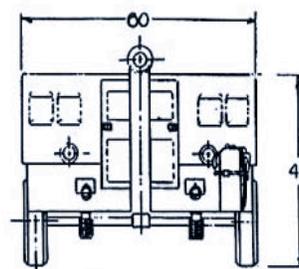
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TABLE C-XXX Characteristic Data for MEP-357A - Continued.

Optional Equipment			
Description	NSN	Weight (lbs)	Effect on Dimensions (in)
Winterization system:			
Technical Manuals			
Army	Air Force	Marine Corps	Navy
			NAVAIR 19-45-20

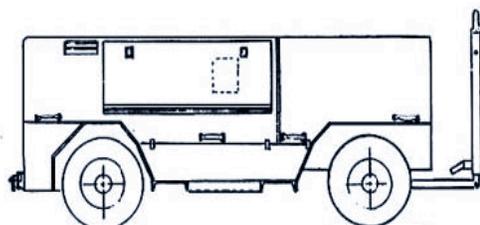


TOP VIEW

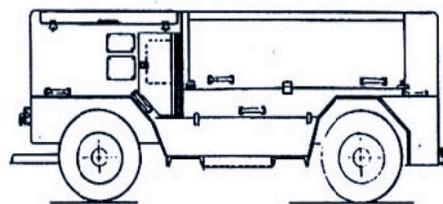


FRONT VIEW

NOTE: ALL DIMENSIONS ARE IN INCHES.



SIDE VIEW-RH



SIDE VIEW-LH

FIGURE C-69 Aircraft Ground Support Unit, Gen Set, 72 kW, DED, 400 Hz; 21 kW, 28 VDC

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C.3.1.33 DISE, 200 Amp per Phase Feeder System - 3 Phase . Used to distribute 3 phase power from 60, 100 and 200 kW generator sets.

TABLE C-XXXI Characteristic Data for the M200

	DISE
Model	M200 Electrical Feeder System
Description	120/208V, 3 phase, 200 amp/phase. Includes feeder center, pigtail, feeder cable and carrying straps for DEPMEDS
Specification	NOT PROCURABLE
NSN	6150-01-208-9755
LIN	F55488
SSN	R45500
Weight (lbs)	140
Circuit breakers	Thermal-magnetic w/ground fault on 20 amp output
Dimension: LWD (in)	33.5 x 23.0 x 20.4
(Vol in ft ³)	9.1



FIGURE C-70 DISE, 200 Amp per Phase Feeder System - 3 Phase

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C.3.1.34 DISE, 100 Amp per Phase Feeder System - 3 Phase. Used to distribute 3 phase power from 30, 60, 100 and 200 kW generator sets.

TABLE C-XXXII Characteristic Data for the M100

DISE	
Model	M100 Electrical Feeder System
Description	120/208 V, 3 phase, 100 amp/ ph. Includes feeder center, pigtail, feeder cable and carrying straps for DEPMEDS
Specification	NOT PROCURABLE
NSN	6150-01-208-9754
LIN	F55487
SSN	R45400
Weight (lbs)	77
Circuit breakers	Thermal-magnetic w/ground fault on 20 amp output
Dimension: LWD (in)	24.3 x 22.4 x 20.4
Ship Cube (ft ³)	6.4



1



2



4

3 - Electrical Feeder Center: 3-phase 120/208 V, 100 amp/ph, LIN F55621, NSN 6150-01-308-5671, Part Number 13226E7029, 1 ea

2 - Service/Feeder Cable: 50-ft (15.2m), 100-amp, 8-pin, NSN 6150-01-256-6304, Part Number 13226E7024, 2 ea

3 - Cable Carrying Strap, NSN 6150-01-256-6299, Part Number 13226E5825, 8 ea

4 - Pigtail Cable: 4-ft (1.2 m), 100-amp, 200-amp, 8-pin, NSN 6150-01-256-6300, Part Number 13226E7020, 1 ea

FIGURE C-71 DISE, 100 Amp per Phase Feeder System - 3 Phase

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C.3.1.35 DISE, 40 Amp per Phase Distribution System - 3 Phase. Used to distribute power from 10 through 200 kW AC generator sets. The picture below is of Three Phase Family of DISE components and includes 200 and 100 amp feeder centers and 40 amp distribution center.

TABLE C-XXXIII Characteristic Data for the M40

	DISE
Model	M40 Electrical Distribution System
Description	120/208 V, 3 phase, 40 amp/phase. Includes distribution center, cables, carrying straps, receptacles and storage container
Specification	NOT PROCURABLE
NSN	6150-01-208-9753
LIN	F55485
SSN	R45300
Weight (lbs)	55
Circuit breakers	Thermal-magnetic & ground fault on some 20 amp output
Dimension: LWD (in)	24.3 x 21.8 x 16.1
Ship Cube (ft ³)	4.9



1



2



4

1 – Distribution Center: 3-phase, 120/208 V, 40-amp/ph, LIN F55485, NSN 6150-01-307-9446, Part Number 13226E7028, Dist Ctr Part Number 13229E6345, 1 ea

2 – Service/Feeder Cable: 100-ft (30.48m), 40/60-amp, 3-pin, NSN 6150-01-247-4761, Part Number 13226E7023-2, 1 ea

3 – Cable Carrying Strap, NSN 6150-01-256-6299, Part Number 13227E5825, 16 ea

4 - Pigtail Cable: 4-ft (1.2m), 40/60-AMP, 3-pin, NSN 6150-01-256-6301, part Number 13226E7019, 1 ea



Transit and Storage Container, NSN 6150-01-256-6298, Part Number 13227E5830, 1 ea
Packaging List, Part Number 13227E5826

Box Receptacle, 120 V, 20-amp, NSN 6150-01-251-9125, Part Number 13226E7040, 1 ea

Extension Cable, 25-ft (7.6 m), 20-amp, 3-pin, NSN 6150-01-250-0044, Part Number 13226E7032-2, 3 ea

Extension Cable, 50-ft (15.2 m), 20-amp, 3-pin, NSN 6150-01-250-3643, Part Number 13226E7032-1, 3 ea

Utility Light, PN# 13226E7043, 2 ea

Light Bulb Container, PN# 132275829, 3 ea
Blue, 40 Watt, PN# W-L-101/68, 3 ea
White, 75 Watt, PN# W-L-101/85, 3 ea

FIGURE C-72 DISE, 40 Amp per Phase Distribution System - 3 Phase

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C.3.1.36 DISE, 60 Amp Distribution System - Single Phase. Used to distribute single phase power from 5 through 15 kW AC generator sets and single phase output from feeder systems.

TABLE C-XXXIV Characteristic Data for the M60

	DISE
Model	M60 Electrical Distribution System
Description	120V, 1 phase, 60 amp dist center and associated components for DEPMEDS
Specification	NOT PROCURABLE
NSN	6150-01-208-9752
LIN	F55553
SSN	R45200
Weight (lbs)	45
Circuit breakers	Thermal-magnetic w/ground fault on some 20 amp output
Dimension: LWD (in)	24.3 x 21.8 x 15.5
Ship Cube (ft ³)	4.7



FIGURE C-73 DISE, 60 Amp Distribution System - 1 Phase

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C.3.1.37 DISE/PDISE, Utility Receptacles and Lighting Set. Used to distribute single phase power to lighting and electrical receptacles from distribution systems.

TABLE C-XXXV Characteristic Data for the M46

	DISE
Model	M46 Electrical Utility Kit
Description	Extension cords, utility receptacles and lighting sets
Specification	NOT PROCURABLE
NSN	6150-01-208-9751
LIN	U89185
SSN	R62800
Weight (lbs)	85
Dimension: LWD in inches	16.0 x 16.0 x 26.0
Ship Cube (ft ³)	3.9



1 – Transit and Storage Container, LIN U89185, NSN 6150-01-208-9751, Part Number 13229E6362, 1 ea

2 – Receptacle Box: 120 V, 20-amp, NSN 6150-01-251-9125, part Number 13226E7040, 6ea

3 – Cable Securing Strap, NSN 6150-01-250-0045, Part Number 13226E7044, 6 ea

4 – Support Rope Assembly, 53-h (1.2m), NSN 6150-01-256-6302, Part Number 13226E7041, 2 ea

5 – Light Bulb Kit: NSN 6150-01-264-2068, Part Number 13227E5829, 3 ea
 40 W, **Blue**, NSN 6240-00-617-1 744, Part Number W-L-1 01/68, 3 ea
 75 W, **White**, NSN 6240-00-689-8504, Part Number 40A/B-120V, 3 ea

6 – Utility Light, 120 V, dual socket, incandescent, NSN 6230-01-247-4784, Part Number 13226E7043, 2 ea

7 – Extension Cables, NSN 6150-01-247-4766, Part Number 13226E7032-3, 6 ea

8 – Branch Circuit Cable Assembly: 24-h (7.3m), 20-amp, 3-pin, NSN 6150-01-251-9124, Part Number 13226E7034, 2 ea

FIGURE C-74 DISE, Utility Receptacles and Lighting Set

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CONCLUDING MATERIAL

Custodians:

Navy-YD
ARMY-CR4
Air Force-99

Preparing activity

ARMY-CR4
(Project 6115-2012-001)

Review Activities:

Army - CE, MI,
NAVY-AS, EC, MC
Air Force -11
DLA - GS

NOTE: These activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST database at: <http://assist.dla.mil>.